# HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 15, NO. 2, ABSTRACTS 153-309. FEBRUARY 1975

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HOSPITAL ABSTRACTS

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## HOSPITALS IN GREAT BRITAIN

153. McLACHLAN, G., editor. **Positions, movements and directions in health services research: the papers and proceedings of a meeting held at Hertford College, Oxford 1974.** London, Oxford University Press, for Nuffield Provincial Hospitals Trust, 1974, vii, 171pp. £2.50.

This is the report of a meeting convened by the Department of Health and Social Security to explore current issues concerned with health services research and development and in particular the identification of policies, the pursuit of objectives, and the application of findings in practice. There are two papers on specific applications—the care of the mentally handicapped and the community hospital programme.

## HOSPITALS IN OTHER COUNTRIES

154. RENDELL, W. B. and KARNAUCHOW, P. N. **An experience in centralizing and unifying community hospitals.** *Canadian Medical Association Journal*, Ottawa, 1974, Nov. 2, vol. 111, no. 9, pp. 1003-1004.

This paper describes the development of centralized services for the two hospitals in North Bay, Ont.: St. Joseph's General Hospital, run by a religious community, and North Bay Civic Hospital, run by the city itself. The services centralized (despite opposition in some cases) include laundry (which now also serves three other hospitals), maternity, ophthalmology, ear, nose and throat, urology (including haemodialysis), coronary care and laboratories.

155. KNYVETT, A. F. **The health centre hospital: the community hospital of the future.** *Medical Journal of Australia*, Sydney, 1974, Oct. 12, vol. ii, no. 15, pp. 569-571.

With the trend towards specialization within medicine plus the future development of community health centres the author feels that cottage hospitals could be made to work successfully. Patients with serious diseases or needing major surgery and those needing special investigational or treatment facilities will always have to go to specialist hospitals but those with acute illnesses or needing observation, those who cannot be treated at home, those needing the facilities of a casualty department or using it as a general practitioner, and those needing investigation by a specialist could in many cases be treated peripherally if the facilities were available. The following criteria are suggested for a new small community hospital: (i) the facilities provided should be simple but adequate for a clearly defined range of patient care; (ii) doctors will have to

provide 24-hour cover for all patients and accept some limitations on their work; and (iii) a link with an active community health centre will allow more economical use of expensive investigational facilities and the use of paramedical workers. Given these provisos the author can foresee the development of relatively small hospitals staffed by general practitioners closely associated with community health centres functioning as local community hospitals.

## PLANNING, DESIGN AND CONSTRUCTION

See also Abstract No. 268

156. MEADE, J. **A mathematical model for deriving hospital service areas.** *International Journal of Health Services*, Farmingdale, N.Y., 1974, vol. 4, no. 2, pp. 353-364.

This paper reports a study in Idaho which explored the basic premise that patient flow in rural areas is based on proximity to medical care. The hospital is defined as the centre of care and hospital catchment areas are defined by patient movements. A methodology is described for analysing patient flow among a group of hospitals. Finally, the author introduces a mathematical model which replicates patient movement to act as an aid in the hospital planning process.

### DESIGN OF INDIVIDUAL GENERAL HOSPITALS

157. MORRISON, C. D. **Economics dictates innovative solution.** *Southern Hospitals*, Greenville, S.C., 1974, Oct., vol. 42, no. 10, pp. 8-10.

Economics dictated that the new 101-bed building to replace the 51-year-old Logan (W.Va.) General Hospital should be built on a 40-feet wide strip of land beginning at the front wall of the existing building and continuing to the edge of a river bank. The solution has been to start the new hospital six feet from the walls of the old one and suspend more than half of it 44 feet over the river bank on eight huge concrete piers. When the new hospital is fully occupied the old one will be demolished to provide a car park. Administrative, diagnostic and treatment departments and staff facilities occupy the ground and first floors. The third floor houses the maternity department, operating suite, and cystoscopy and central sterile rooms. Wards occupy the third and fourth floors. Another floor can be added when the need arises. The entire hospital is air-conditioned. Two photographs, but no plans, are included.

158. **Unique private room plan.** *Southern Hospitals*, Greenville, S.C., 1974, Oct., vol. 42, no. 10, pp. 10, 12, 15.

The most significant design decision incorporated in the second phase of the expansion and renovation of Mercy Hospital, Charlotte, N.C., involves a new concept of patient room design, the high cost and poor nursing efficiency ruling out the conventional private room. The patient room is seen as an extension of the treatment procedures, placing emphasis on medical function. Room arrangements, utilities and furnishings were positioned for treatment and nursing efficiency. Nursing units have a

minimum of 40 beds, with none more than 90 feet from the nurses' station. There are two isolation rooms in each nursing unit. Twelve photographs, but no plans, are included.

## DESIGN OF SPECIAL DEPARTMENTS

See also Abstract Nos. 181 (Training schools), 251 (Operating suites)

159. GREAT BRITAIN. DEPARTMENT OF HEALTH AND SOCIAL SECURITY. **A guide to planning central stores.** London, Department of Health and Social Security, 1974, 14pp.

This booklet is a guide to the planning of a central store, which is defined as one serving a number of hospitals, clinics and other users and generally replacing a series of hospital and other stores. The booklet covers: the operation of a central stores system; storage methods and layout of the store; design considerations; equipment; and the size of the central store.

160. **Renovation and expansion provide efficient, esthetic radiation therapy unit.** *Hospitals*, Chicago, 1974, Oct. 16, vol. 48, no. 20, pp. 22, 24.

The Radiation Therapy Center, Sinai Hospital of Baltimore, is described and illustrated by an external photograph and a plan. It is a relocation and expansion of the hospital's previous radiotherapy facilities. It provides easy access for out-patients and expansion will be possible with minimal disruption of activities. The two major therapy units are in thick concrete 'pods' which provide the necessary shielding efficiently and economically. Relatively low-powered equipment in the renovated area requires only one inch of lead bonded to plywood for shielding. The interior of the centre has vinyl sheet and tile covering and there are specially designed polyvinyl chloride guards on surfaces that need protection from wheeled traffic. Lighting in corridors and patient areas is designed to eliminate glare and other efforts have been made to create a supportive atmosphere for patients, many of whom are very ill, depressed and frightened. Appointments are timed so that few are in the facility at one time and each patient is supervised throughout by the technician who will be co-ordinating his treatment. A light court with potted plants, fountains and skylights is included in each 'pod'. The enclosing walls of the courts are part of the radiation shielding and are separated from the treatment areas by 12-foot sliding glass doors. The courts are also used for moving heavy equipment in and out of the treatment areas.

161. **Kanagawa Prefectural Rehabilitation Center.** *Japan Architect*, Tokyo, 1973, Dec., vol. 48, no. 12, p. 13.

This recently completed centre is the largest of its kind in Japan. It can accommodate 710 patients (both physically and mentally handicapped) and requires a staff of over 800. The facilities are designed for short- and long-stay patients, with a maximum stay of seven to eight months. A separate facility is being built for patients who require a longer period for rehabilitation. The main building is a nine-storey steel and reinforced concrete structure; others are three-, four- and seven-storey reinforced concrete structures. Conveyors, underground corridors and bridges connect the various buildings. A site plan and two photographs are included.

162. MURPHY, J. and HODSON, W. A. **Neonatal intensive care. 2. Design and function of a special unit.** *Postgraduate Medicine*, Minneapolis, 1974, July, vol. 56, no. 1, pp. 65-70.

The wide variety of clinical problems in the neonate and the equipment and staff necessary for their treatment are important considerations influencing the design of a neonatal intensive care unit. The infant must be provided with a controlled, protective environment in which physiological monitoring, life support systems and diagnostic facilities are immediately available. This paper discusses structural design alternatives, monitoring equipment, and ventilation.

## DESIGN OF SPECIAL HOSPITALS OR UNITS

See also Abstract No. 285 (Maternity)

163. STABLEFORTH, P. G. and RATLIFF, A. H. C. **The critical study of the design of a new accident centre.** *Injury*, Bristol, 1974, Nov., vol. 6, no. 2, pp. 99-106.

The new accident centre at Bristol Royal Infirmary was opened on 1 February 1972. It is part of a nine-storey block built on the side of a hill. The ambulance courtyard and reception area are at the back of the building on the third level, while walking patients enter from the front of the building on the second level. The wards for the acutely injured and critically ill patients are two floors above the reception floor and have 40 beds. The other wards for the accident service, with a further 40 beds, are a considerable distance away and are used chiefly for convalescent patients, usually after operation. Whilst the department has proved very satisfactory, certain features of the design of the reception floor have produced problems in the movement of patients and their care. These problems are analysed and recommendations are made which it is hoped will help those planning or operating a new department. The defects in the general plan relate to patient flow, patient 'isolation' and observation, waiting areas, nurse convenience, transit and noise. Specific areas in which there are defects are the clerical and reception office, ambulant patient consultation suites, resuscitation rooms, teaching space and plaster room. Plans of the reception floor are included.

164. BOLCHOVER, J. **Adolescent unit: architects' approach and appraisal.** *Hospital Development*, London, 1974, Nov./Dec., vol. 2, no. 6, pp. 10-12.

At St. Mary's Hospital, Manchester, an unused 'Nightingale' type maternity ward has been converted to provide in- and out-patient facilities for adolescents. The partitioned patient rooms, mostly single, are grouped around central common areas which serve both as dayroom activity space and nurses' station. Sliding panels and doors in the partitions form large openings between adjacent bedrooms, and between bedrooms and common activity spaces, encouraging social contact. Bed head positions are located to give patients a view out of their rooms and across to their neighbours. Rooms are small but well fitted out with wardrobe integrated with the partitions, wash basins at wheel chair user's height, mirror, light and shaver point. Other fittings include adjustable shelving units, angle-poise light, oxygen point, call system, and radio unit. Corridors and day spaces are carpeted. It is too early for the administrative, medical and nursing staff to comment on the functions of the ward, but the physical aspects

are discussed as a guide to design teams planning similar units. Plans of the ward before and after conversion and a plan perspective of single and double rooms are included.

165. **Homely institutional.** *Architects' Journal*, London, 1974, Dec. 11, vol. 160, no. 50, p. 1367.

The Marie Foster Home for the young chronic sick is situated in the grounds of Victoria Maternity Hospital, Barnet, and is a joint venture of the hospital authorities and the Multiple Sclerosis Society. The unit's 30 beds are in six- and two-bedded wards in the shorter wing of the single-storey L-shaped building and in single rooms in the longer wing. The latter also has dining-room, day-room, quiet room, kitchen, shop, hall, treatment room and staff rooms. A plan and four photographs are included.

166. WIPF, M. Neubau kantonales Frauenspital Fontana Chur. **[Reconstruction of the Fontana Cantonal Women's Hospital, Chur.]** *Veska*, Aarau, 1974, Oct., vol. 38, no. 10, pp. 567-581.

The new Fontana Women's Hospital, Chur (architects: Hartmann, Chur, and E. Schindler, Zürich) which replaces an existing hospital, was officially opened in June 1974. It has six upper floors, 111 beds, and provides accommodation for 26 premature and 61 normal infants. There is also an underground civil defence centre with space for 240 beds and an operating theatre. Floors are allocated as follows: ground, administration and technical plant; first, laboratory, kitchens, laundry and stores; second, gynaecology general, labour rooms and operating suite; third, gynaecology private; fourth, maternity general; fifth, maternity private; and sixth, premature infants. Wards (five or six-bedded rooms in general wards, single or double in private wards) are on a single corridor plan. The paper is illustrated with a site plan, plans of each floor, a schematic drawing showing allocation of departments, and four photographs.

### WARDS AND PATIENTS' ROOMS

See Abstract No. 158

### EVALUATION OF BUILDINGS

See Abstract No. 163

## ENGINEERING SERVICES

See also Abstract No. 173

167. KENWORTHY, G. and SIMPSON, D. C. **The provision of a service in rehabilitation engineering.** *Biomedical Engineering*, London, 1974, Nov., vol. 9, no. 11, pp. 515-516.

Rehabilitation engineering is concerned with providing a disabled person with some form of assistive system which ideally restores him to normal or at least enables him

to enjoy a quality of life which is acceptable to him. It usually means providing, fitting and perhaps modifying some standard device or else developing some new aid for particular requirements. It presents problems because it nearly always involves equipment which is intimately associated with the user. Important factors are the control principles, compatability with the patient's way of life and the effect of mechanical damage and failure. The design and provision of a device is only the first step in the service. There is a commitment to maintain it and if possible to improve the level of rehabilitation achieved. Two further difficulties arise in practice: (i) how to introduce more generally a device which has proved successful on a small scale; and (ii) provision of a good service encourages further requests for involvement which may lead to the overloading of a unit. The provision of a service of rehabilitation engineering is quite different from the one-off fitting of a prototype device. The Bioengineering Centre, Princess Margaret Hospital, Edinburgh, incorporates research and development (especially in powered artificial arms and hands) as well as fitting, repair and maintenance and the design and production of other aids. Of the staff of 25 about half provide a service and the other half do research.

## ELECTRICAL INSTALLATIONS AND EQUIPMENT

168. FIGG, D. J. **Cabling of electrical installations in Oxford method hospital buildings.** *Hospital Engineering*, Stevenage, 1974, Nov., vol. 28, pp. 21, 23-25.

The Oxford method of hospital building, which has been used successfully in many projects, is based on dimensional co-ordination, maximum prefabrication of components, and rapid and dry construction using standard drawings, details and specifications. The problems associated with cabling for mains voltage electrical engineering services are discussed under three headings: high-voltage distribution, low- and medium-voltage distribution and low- and medium-voltage subcircuits. The basic requirements of the system finally chosen are described, together with the standard wiring systems presently available. The factors influencing the choice of mineral-insulated wiring system for use in the Oxford method are enumerated. These include degree of mechanical protection, screening and earth continuity, fire hazard, simplicity of installation, rewirability, and life of installation.

## COMMUNICATION SYSTEMS

169. **Staff location systems at St. Bartholomew's Hospital.** *Hospital and Health Services Purchasing*, London, 1974, Nov., p. 434.

The staff location system at St. Bartholomew's Hospital, London, uses a VHF radio paging system called Execall. The hospital has about 200 people plus district nurses and midwives each with a pocket paging unit. Separate switchboard lines are allocated for people to ask the hospital's communications centre to put out a radio paging call and another batch of lines is reserved for paging unit holders to return the call. When a routine call is made a signal tone sounds on the person's pocket receiver and he goes to the nearest telephone to enquire of the main switchboard the reason for the call.

Speech is only sent over the VHF radio in emergency situations to get the cardiac arrest, mobile resuscitation, or fire and administrative emergency teams on the spot quickly.

## TRANSPORT IN GENERAL

170. MASSOW, H. von and WIRTH, P. Gestaltung spitalinterner Transportsysteme. **[Organizing a hospital internal transport system.]** *Veska*, Aarau, 1974, Oct., vol. 38, no. 10, pp. 583-591.

A study of automated internal transport systems for hospitals shows that they will only save labour and cost if, at an early planning stage, the construction of the building and the organization of work in supply areas and on the wards is made to harmonize with such a system. There are two main systems to choose from: the 'single' transport system with medium-sized containers carrying from 50 to 70 kg. on conveyor tracks and serving 20- to 30-bedded ward units with all types of goods; and the 'double' system, with separate installations for large goods (80 by 120 cm. and carrying up to 150 kg.) and for small goods (35 to 60 cm. in length by 30 cm. in breadth and 40 cm. in height). Experience has shown that the relatively high capital cost of a well-planned automated transport system is thoroughly economic and that such a system can make an effective contribution to the slowing down of cost increases.

## VENTILATION AND AIR-CONDITIONING

See Abstract Nos. 225, 229, 251

## INSULATION AGAINST SOUND AND TEMPERATURE

See Abstract No. 233

## MAINTENANCE OF BUILDINGS AND EQUIPMENT

171. FRYER, V. **Aspects of maintenance.** *Hospital Development*, London, 1974, Nov./Dec., vol. 2, no. 6, pp. 19-20, 23.

This paper outlines steps taken to develop a common planned preventive maintenance system for hospitals in the North East Thames region. These include: (i) production of a comprehensive card (reproduced) to eliminate the time calculation sheet, master card docket and equipment; and (ii) development of detailed inventory sheets for the collection of data, including a comprehensive room sheet (reproduced) to accommodate all sections of the maintenance field and summary sheets. The sheets are now being used by two special teams to prepare a reliable inventory of every hospital in the region. Local management will update room sheets to allow for alterations and additions at the end of each financial year. The inventories will provide the data so necessary for the smooth running of a planned preventive maintenance system and accurate yardsticks for comparisons between hospitals.

## SANITARY EQUIPMENT AND FITTINGS

172. NEW ZEALAND. DEPARTMENT OF HEALTH. HOSPITAL DESIGN AND EVALUATION UNIT. **Bathing facilities for long-stay geriatric patients: part 1 of a study of planning requirements for geriatric patients.** Wellington, Department of Health, 1974, [92]pp.

This report represents the first stage of a comprehensive study of functional requirements of the various aspects of geriatric care. It is based on: (i) a questionnaire sent to all hospital boards for distribution to nursing staff actively involved in bathing elderly people; and (ii) work studies of the various techniques in use in six selected hospitals. The work patterns observed are outlined, illustrated and discussed. Recommendations are made on the number of facilities required, grouping of facilities, the wheelchair shower, the bath, choice of facility and location of facilities. Design requirements are presented and illustrated.

# EQUIPMENT, FITTINGS, FURNITURE

## EQUIPMENT GENERALLY

See also Abstract No. 276

173. BOOTH, E. **The design and application of 'robots' in hospital engineering—the route to the prototype.** *Hospital Engineering*, Stevenage, 1974, Nov., vol. 28, pp. 3-6.

It is reasonably safe to say that the technological knowledge exists to enable the development of highly sophisticated robots for use in many operational fields. Two main factors in medical engineering limit such developments: the provision of risk capital, and the specification of requirements. This paper describes the experience of the Mechanical Engineering Department, Queen Mary College, London, in designing robots for use in hospitals. These include a wedge belt lift for moving patients from a bed to a trolley; a stretcher lifter; a device to assist patients to climb stairs; a bath lifter; a tilting cot for children recovering from anaesthesia; and a patient turning device. There are photographs of some of the prototypes of these.

174. PATTERSON, D. J. **Heavy cost for hospitals: the toll of equipment replacement.** *Dimensions in Health Service*, Toronto, 1974, Nov., vol. 51, no. 11, pp. 22-23.

This paper describes the application of a formula worked out during a study of capital replacement needs at Vancouver General Hospital. Hospitals are one of the few industries whose budgeting processes do not allow for depreciation of existing equipment. The formula worked out in Vancouver allows replacement costs of equipment to be established so that a plan of replacement can be made. This in turn reduces costs on repairing obsolete equipment. The elements of the formula are: (i) the amount paid for capital equipment in a given year; (ii) the equipment's useful life and; (iii) the predicted buying power of the Canadian dollar. Diagrams show the working of the formula.

# STAFF GENERALLY

See Abstract No. 274

## STAFF COMPLEMENTS

See also Abstract No. 294

175. EICHHORN, S. Arbeitseinsatzplanung im Krankenhaus. **[Labour supply planning in the hospital].** *Krankenhaus Umschau*, Kulmbach, 1974, Oct., vol. 43, no. 10, pp. 853-856, 859-863; Nov., vol. 43, no. 11, pp. 941-944, 949-954, 957-961.

The first part of this detailed study of hospital staffing problems is concerned with the staff as a whole. In determining staffing needs three main factors have to be considered: the nature and extent of the work to be performed; the staff complements necessary to carry out this work; and the times for which staff will be required to work. The necessary planning of hospital work and its effect on staff complements, in relation to guidelines laid down by various authorities, is discussed in detail. The second part of the paper is devoted to staffing needs and staff complements in the nursing service. The guidelines of the German Hospital Institute are considered and examples are given of formulas for determining nursing complements. There are 49 references to the literature.

176. OERI, H. R. Die Forderung auf Personalreduktion im Krankenhaus: Folgerungen. **[The demand for staff reductions in the hospital: consequences.]** *Veska*, Aarau, 1974, Oct., vol. 38, no. 10, pp. 550-553.

The author, who is director of personnel at the Basel Cantonal Hospitals, discusses the problems which arise when the attempt is made to reduce staff costs: he bases his views on experience at his own hospital. There are three main ways of limiting or reducing staff complements: setting a ceiling on growth; leaving unfilled any vacancies that may arise (an emergency short-term measure which works unfairly as posts which normally have a high turnover are most affected); and staff reductions (which can be the result either of a change in objectives and duties or of correcting overmanning). If staff reduction is to be successful and acceptable the authorities must decide on clear objectives and there must be responsible, resourceful and competent action by the administration and heads of departments. There must be proper consultation of all concerned, information must be passed down, and time must be taken to ensure that everything is properly worked out.

## RECRUITMENT

See also Abstract No. 258

177. LEWIN, D. **Selection strategies for lower skill hospital classes.** *Public Personnel Management*, Chicago, 1974, Sept./Oct., vol. 3, no. 5, pp. 436-438.

This brief paper identifies some of the problems in selection techniques for lower skill hospital staff and offers some possible solutions, particularly personality tests.

178. BRAND, I. A. G. and others. **Staff turnover in Victorian hospitals.** *Hospital & Health Care Administration*, Prahran, Victoria, 1974, Sept., vol. 4, no. 9, pp. 5-10.

This paper reports a study of turnover rates for various classes of staff in 25 Victorian public hospitals. A gross turnover rate of 46 per cent was obtained. For both male and female staff the lowest turnover rate (24 and 34 per cent respectively) was in the country hospitals and the highest (52 and 67 per cent) in the metropolitan non-teaching hospitals. The overall turnover rates were 40 per cent for men and 48 per cent for women. Figures for male, female and all staff divided by classification of job and type of hospital are given. It is very difficult to precisely cost turnover in hospitals but the authors believe that the average cost for all staff would probably exceed A$300 per termination of employment and may well be as much as A$500 taking into account the relatively high proportion of professional staff in hospitals. One of the most important factors influencing staff turnover is the method of orientation of new employees. A study of the literature revealed that an annual turnover rate of 70 per cent is an average sort of figure for non-professional occupations and would seem to indicate that the rates in the hospitals studied compare quite favourably with those in outside industry.

## STAFF MANAGEMENT

See also Abstract Nos. 180, 186, 211

179. VORWERK, K. and KAMPEN, L. von. Dienstplangestaltung unter Berücksichtigung der Arbeitszeitverkürzung auf 40 Stunden. **[Organization of work plans for the 40-hour week.]** *Krankenhaus Umschau*, Kulmbach, 1974, Nov., vol. 43, no. 11, pp. 965-969.

The first part of this paper sets out the legislation governing the 40-hour week, as applicable to West German hospitals, with effect from 1 October 1974. In the second part the chief nursing officer of the State Municipal Hospital (Lower Saxony) describes the nurse rota system for a 40-hour week applied in her hospital for a 35-bedded ward with an average occupancy of 30 patients. The normal day shift is 6¾ hours with one week-end and one other day off per fortnight: nurses also do two split shift days per fortnight. The total nursing staff required to work this system is 10.8, including the night staff.

## STAFF TRAINING

See also Abstract Nos. 183, 184, 271, 293

180. BROWN, F. **A supervisory skills course for beginners.** *Industrial and Commercial Training*, Northampton, 1974, Dec., vol. 6, no. 12, pp. 574-580.

This paper describes the administrative details and content of a three-day course for supervisors in the Surrey Area Health Authority, East Surrey District. The course is attended by all supervisors, whether they are head porters in small hospitals, staff nurses, administrators, domestic supervisors or therapists. The course covers: what supervision is, instruction in the work situation, problems of a supervisor, hospital administration, the health service—today and tomorrow, the supervisor's role, a human relations exercise, and relationships and communications.

181. **Training goes underground.** *Modern Healthcare*, Chicago, 1974, Oct., vol. 2, no. 4, pp. 49-52.

Memorial Hospital Medical Center of Long Beach, Calif., and three institutions of higher education have co-operated in the building of a $2.75 million education centre. The facilities include: (i) medical library; (ii) office and work spaces, including a room for the Tel-Med library of health information tapes; (iii) television studio; (iv) graphic arts studio; (v) two classrooms, each accommodating 36 persons and well-equipped with audiovisual aids; (vi) conference room; (vii) 200-seat theatre; (viii) 700-seat forum with extensive audiovisual facilities; and (ix) catering facilities. The centre is managed by a board of 17 directors representing the participating institutions. The staff includes a director, administrator, executive secretary, three training and development specialists, three audiovisual staff, two medical photographers, three library staff and a secretary-receptionist. A plan of the centre is included.

### STAFF WELFARE

See Abstract No. 222

## SPECIAL CLASSES OF STAFF

### ADMINISTRATIVE AND CLERICAL STAFF

See Abstract No. 211

### NURSING STAFF

See also Abstract Nos. 175, 179, 294

182. INTERNATIONAL COUNCIL OF NURSES. **Nurses and nursing: proceedings of the 15th quadrennial congress, Mexico City, May 13-18, 1973.** Geneva, International Council of Nurses, [1974], 192pp. £2.00.

The papers given at this conference covered a wide range of topics including humanization of services, control of the nursing profession, the practice of nursing, nursing education, research, and the role of the nurse.

183. KETEFIAN, S. **Trends in curricular innovations in nursing education.** *International Nursing Review*, Basel, 1974, Sept./Oct., vol. 21, no. 5, pp. 139-142.

A survey of innovations in nursing curricula was undertaken in the United States in 1971. All baccalaureate programmes accredited by the National League of Nursing were invited to take part. The term innovation is used to mean a planned, new and specific change in the educational environment of a school of nursing that affects nursing students. Replies to the questionnaire were received from 159 schools within six weeks of posting. This represents an 85 per cent return. Of the 159 replies 28.3 per cent had no innovations to report. The 226 innovations reported could be divided into six categories: (i) teaching methods, 48; (ii) new materials, facilities and equipment for

teaching, 28; (iii) changes in subject matter, content and organization of the curriculum, 81; (iv) changes in time, arrangements, sequence and placement of courses, 15; (v) non-nursing components of the curriculum, 28; and (vi) 26 innovations were still in the planning stage. The innovations in the first three categories are described and the findings are discussed.

184. SOUSA, M. D. D. de. **Portugal's post-basic nursing school: five years later.** *International Nursing Review*, Basel, 1974, Sept./Oct., vol. 21, no. 5, pp. 147-150, 152.

Five years ago the author of this paper submitted a plan of action drafted by the Nurses Training and Management School in Portugal, the aims of which were to educate nurses for teaching and senior posts and to sponsor courses and other activities for improving training and all branches of the nursing profession. The objectives of the school have been broadened and are now: (i) to promote the education of nurses to serve as teachers, senior nurses and matrons; (ii) to promote refresher and more advanced courses for those in senior posts; (iii) to carry out surveys designed to improve teaching and the nursing profession as a whole; (iv) to develop Portuguese nursing by co-operating with official and private bodies; and (v) to promote international exchanges. The post-basic nursing course is outlined and the methods of selecting candidates and evaluating students are described. Refresher lectures are attended by 700 to 800 nurses a year and in addition 293 attended other courses, study tours, etc. last year. Several basic research projects have been completed. There has been co-operation with France and Spain in nurse training. The organization of the school is briefly described and the author sets out some problems and some projects for the future.

185. MURRAY, F. A., TOPLEY, L. and LICENCE, B. **Nurses and their workload.** *Health and Social Service Journal*, London, 1974, Nov. 23, vol. 84, no. 4414, pp. 2723-2724.

A study of nurses' work load in a 118-bedded gynaecology unit practising progressive patient care is presented. Figures are based on a summer quarter in 1973 and a winter quarter in 1974 and show that with a whole-time equivalent of 60 nurses (based on a nurse/bed ratio of 1:2¼) the overload was 1,410 occupied bed days, equivalent to 65 major and 65 minor cases, over the summer period and the equivalent of 56 major and 56 minor cases in the winter period. This overload is unsafe for both patients and staff but a cutback would place the medical staff in the unenviable position of having to assess clinical need. Nurse staffing and funding should be equated to the work load.

186. STEVENS, M. K. **The practical nurse in supervisory roles.** Philadelphia & London, Saunders, 1973, vi, 131pp. £2.15.

The nurse's role does not remain static; the future will demand more, not less, of both the registered nurse and the practical nurse. There is increasing evidence that practical nurses are employed in supervisory roles. They should therefore be trained for this responsibility and this book has been written with this in mind. It is in four parts: (i) leadership in general and the added legal responsibility of supervision; (ii) the practical nurse as a team leader; (iii) the practical nurse as a floor supervisor; and (iv) the practical nurse leader in the community.

## OTHER PROFESSIONAL AND TECHNICAL STAFF

See Abstract No. 258

# ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 203, 250, 252, 262, 269, 277, 295

187. BEST, J. B. and others. **Participative management: the action committee.** *Medical Journal of Australia*, Sydney, 1974, Sept. 28, vol. ii, no. 13, pp. 497-503.

This paper outlines 12 months' experience of action committees in the Royal Melbourne Hospital and discusses their value in enabling multidisciplinary groups to achieve the aims of the hospital. Action committees have been established in the three major areas of wards, casualty and out-patient departments, which this paper concentrates on, as well as in subsidiary areas of intensive care, operating theatres, rehabilitation, radiology, pharmacy and patient reception. Members are drawn from different levels of the hospital management team. The general process of setting up and method of action of the committees is outlined, followed by detailed descriptions of the objectives, methods of action and results achieved by the committees in the three major areas. The action committee forms a very useful means by which management principles can be learnt by doctors, nurses and general staff in the early and middle stages of their hospital experience.

## ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract Nos. 154, 285

188. GROSCHE, J. H. J. Rationalisierungsreserven in der Krankenhausverwaltung. **[Rationalization reserves in hospital administration.]** *Krankenhaus Umschau*, Kulmbach, 1974, Nov., vol. 43, no. 11, pp. 936-940.

From studies involving a number of hospitals the author concludes that, by improving the use made of even conventional systems and methods, the productivity of hospital administration could in many cases be increased by 100 per cent and its costs reduced by 30 per cent. He gives examples of ways in which efficiency can be increased under three main heads: (i) management-oriented measures, including proper delegation of duty, adequate procedure for meetings, setting of priorities, and planning of work; (ii) staff-oriented measures, including personnel policies, adequate training facilities, and work flow studies; and (iii) task-oriented measures, including the use of automation processes, central typing and duplication services, and standardized forms and circulars.

189. CROMWELL, J. **Hospital productivity trends in short-term general non-teaching hospitals.** *Inquiry*, Chicago, 1974, Sept., vol. 11, no. 3, pp. 181-187.

Over the last 10 years the health sector of the United States economy has experienced a rate of inflation considerably higher than the rest of the economy and since 1967 the hospital daily service charge has risen at the rate of 13.5 per cent per year. Two causes of hospital inflation have been analysed empirically: growing third-party payment schemes and limited productivity change. Reference is made to the work of Martin Feldstein and D. Salkever who have shown the importance of increasing demand on

medical care and hospital prices. Another researcher R. Elnicki (see *Hospital Abstracts*, Vol. 13, Abstract 216) has studied the problem of a growing intensity of services per patient day by defining hospital output as the aggregated outputs of each department of the hospital. His general methodology has been adapted by the present writer to published data provided by the Hospital Administrative Services Program of the American Hospital Association. Some theoretical aspects of the method are considered especially in relation to the definition of departmental output, the measurement of input flows, the alternatives for valuing output and the problem of quality. The data base used for the analysis is discussed and a summary of the results is given. Some important areas of future research are outlined.

190. DONNER, E. and OBERHOFER, F. Integration—eine Möglichkeit, die Wirtschaftlichkeit der Krankenhäuser zu erhöhen? **[Integration—a possible means of increasing the profitability of the hospital.]** *Krankenhaus Umschau*, Kulmbach, 1974, Nov., vol. 43, no. 11, pp. 924-926, 929-934.

Three degrees of integration of the services of two or more hospitals are distinguished: (i) integration of catering, laundry, and technical services, leaving all others independent; (ii) integration of services in (i) plus central medical services (operating suite, X-ray, physiotherapy, laboratory, etc.); and (iii) integration of (i) and (ii) plus specialist departments with their ward units (complete integration). A detailed cost analysis of each of these stages is presented. It is shown that in the case of (i) integration is the more advantageous the smaller the hospital is; in the case of (ii) results are less dependent on the size of the hospital; in the case of (iii), which can only be suitable when the hospitals concerned are immediately adjacent, there is little further variation in costs.

191. HOMMEL, H. Das Problem des "sparsam wirtschaftenden und leistungsfähigen Krankenhauses". **[The problem of the economic and efficient hospital.]** *Krankenhaus Umschau*, Kulmbach, 1974, Nov., vol. 43, no. 11, pp. 921-923.

Recent West German legislation on the financing of hospitals makes provision for meeting the costs of 'an economically run and efficient hospital'. The legislation gives more than one definition of what is meant by this phrase and this paper attempts to sort out the confusion. It outlines modern theories on efficiency and points out that commercial criteria are only partly applicable to hospitals. A hospital might be 'economically run' if it dispenses with modern technical developments, but would not be 'efficient' in relation to its main objective of diagnosing and treating illness. The various ways of assessing the qualitative and quantitative performance of a hospital—including proper accounting and costing systems, and statistical records—are discussed.

## RUNNING COSTS

See also Abstract No. 288

192. MAGEE, C. C. **Medium term marginal costs in the hospital service.** *Hospital and Health Services Review*, London, 1974, Dec., vol. 70, no. 12, pp. 422-425.

The author begins by defining marginal costs as opposed to fixed and variable costs. The concept is used by accountants to cover costs incurred over a period rather than the additional cost of producing an extra unit of product. The author suggests that the

pattern of cost behaviour in the hospital service is a medium- or long-term marginal one, reflecting the establishment basis on which staff posts are created and filled, in which appointments are not normally made for periods of less than a year. Costs are incurred for a group of patients rather than for any one individual since once a staff appointment is made the expenditure is incurred whether the work load is heavy or not. It is therefore irrelevant to calculate costs on an individual patient basis, despite the fact that individual patient costs may vary considerably. Given a large enough hospital and a reasonable patient mix, any one group of patients will normally be sufficiently large for the demands for treatment by the group to change very little from year to year.

## BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract Nos. 247, 283, 287

193. SZABÓ, L. and TÓTH, J. A kórházi ellátás javításának lehetőségei. **[Approaches to the improvement of hospital care.]** *Egészségügyi Gazdasági Szemle*, Budapest, 1974, Sept., vol. 12, no. 3, pp. 335-346; summaries in Russian, English and German p. 347.

This paper suggests methods of increasing the capacity of and making better use of hospital services. Emphasis is placed on two aspects: (i) the strengthening of ambulatory care to avoid unnecessary in-patient care; and (ii) proper organization of hospital work for the examination and treatment of in-patients. [This abstract has been prepared from an English summary of the paper.]

194. HUBER, G. A., WOLFE, H. and HARDWICK, C. P. **Evaluating computerized screening as an aid to utilization review.** *Inquiry*, Chicago, 1974, Sept., vol. 11, no. 3, pp. 188-195.

After defining the purpose of utilization review and considering how it can be evaluated the authors describe the work of others in establishing the criteria upon which computerized screening models can be based. If computerized screening is effective it provides several advantages over other case selection methods: (i) it takes advantage of more useful information than does random selection; (ii) it permits screening of every case; (iii) model development for a diagnosis is simple and can be done quickly from the data of any abstract service; and (iv) it is much less expensive and tedious than a physician-developed criteria approach. Studies are described which present additional evidence of the breadth of potential application and the efficacy of the screening mechanism. Psychiatric utilization review study presents greater difficulties for the technique because mental diagnoses do not have the specificity that physical diagnoses have but with effort and innovation a computerized screening model can be constructed for any diagnostic group. The future of computerized screening is briefly considered.

## DATA PROCESSING

See also Abstract Nos. 204-207, 217, 254, 267

195. ANDERSON, J. **The application and use of a data base in a hospital.** *Biomedical Engineering*, London, 1974, Sept., vol. 9, no. 9, pp. 420-423.

There are problems not only of creating, manipulating and holding medical informa-

tion, but also with the uses of such data. A medical data base should be designed rather than evolved. The scale of such a proposal enables many difficult issues such as privacy and confidentiality, structure of records and summaries to be planned. Different approaches to automated analysis of data are described including labelling of items of data on input or later, so creating a relational type of data base. The advantages and problems of such an approach are described.

196. DE LA CHAPELLE, N. F., BALL, M. J. and WRIGHT, D. J. **Networked minicomputers for hospital information management.** *Medical Instrumentation*, Arlington, Va., 1974, Sept./Oct., vol. 8, no. 5, pp. 281-284.

The recent advent of minicomputers represents a new opportunity to use cost-effective computer technology to meet hospital information system requirements. Of particular significance is the potential to establish a network of minicomputers to meet the diverse needs of multiple hospital functions. This paper examines the basic technical aspects of this approach.

197. DOCKSTADER, J., HEPBURN, B. and STRAUSS, R. **Cy Borg, M.D.—guidelines for developing socially beneficial medical computer systems.** *Medical Instrumentation*, Arlington, Va., 1974, Sept./Oct., vol. 8, no. 5, pp. 269-273.

Medical computing actions are mushrooming, predominantly in nine areas: hospital administration, management of internal hospital supply, automation of food services, patient history, hospital pharmacies, clinical laboratories, medical libraries, diagnosis and teaching. Ideological conflicts will result, primarily related to the human freedoms of individualism, property rights, and the right to work. To ensure that computer systems develop in socially beneficial ways, the authors recommend: (i) adopting a moral stance not of fearing change, but of defining progress; and (ii) applying Isaac Asimov's three laws of robotics. These laws state that a robot: (i) may not injure a human being or, through inaction, allow a human being to come to harm; (ii) must obey orders given by human beings unless they conflict with (i); and (iii) must protect its own existence as long as such protection does not conflict with (i) and (ii). Application of these laws will improve man/machine relationships.

198. RANDALL, A. M. **Buying the new generation machine is not always the answer to computer efficiency.** *Hospital Financial Management*, Chicago, 1974, Oct., vol. 28, no. 10, pp. 36-38, 40, 42.

Ordering and installing a new generation computer system requires a great deal of justification; it must be overwhelmingly apparent that current and near future needs cannot be met with currently available equipment. Although the retention of a third generation system installation has little 'leading edge' prestige, it is probably the least costly, most easily justified cost-effective choice. Although easier to follow the advice of the vendor, thorough examination of the third party market and of the independent peripherals and software market may allow the hospital to save as much as 60 per cent of its machine cost with no reduction in performance. The financial manager should see what can be most economically squeezed from the present installed generation before moving to newer and more advanced hardware. Only then can the hospital be sure it is getting the most for its data processing expenditure.

## ORGANIZATION AND METHODS, WORK STUDY

See Abstract Nos. 185, 231, 270, 284

## MEDICAL RECORDS

See also Abstract No. 267

199. FRIES, J. F. **Alternatives in medical record formats.** *Medical Care*, Philadelphia, 1974, Oct., vol. 12, no. 10, pp. 871-881.

A comparative study is presented of five medical record formats for manual medical information storage. The five types are: traditional out-patient record; traditional in-patient record; the problem-oriented in-patient record (listing the various problems presented, with the documentation of the physician's approach to each problem); the problem-oriented out-patient record; and the time-oriented record (with a fixed location for specific data). It is shown that with a traditional record to hand the physician needs on average 30 to 40 seconds to answer a simple clinical question; with time-oriented record the information can be obtained in about a quarter of the time and with greater accuracy. With data more accessible, information in the record may play a more active role in decision making.

200. NEWBLE, D. I., JUDD, S. J. and WANGEL, A. G. **Quality control of patient care—the practical application of problem oriented medical records.** *Australian and New Zealand Journal of Medicine*, Sydney, 1974, Feb., vol. 4, no. 1, pp. 23-28.

This paper describes the successful introduction of problem-oriented medical records into a general medical unit without the need for computers or specialized stationery. The change requires an increased time commitment by resident and senior medical staff and the development of a training programme in case record structuring for new staff. The system is acceptable to resident staff who recognize an improvement in their own training and in patient care. A weekly clinical audit has been an integral part of the system. A quality control procedure has been developed and applied to the management of myocardial infarction.

201. **Symposium on the problem-oriented record.** *Nursing Clinics of North America*, Philadelphia, 1974, June, vol. 9, no. 2, pp. 211-302.

The purpose of this symposium is to present a general introduction to the problem-oriented medical record, especially as it relates to nursing practice. In addition to general papers, there are descriptions of specific applications of problem-oriented medical records in a general hospital, coronary care unit, children's department, public health agency and psychiatric hospitals.

202. ANDERES, R., MÄDER, D. and ZIHLMANN, M. Vereinheitlichung des Rapportsystems am Kantonsspital—Universitätskliniken—Basel. **[Unification of the reporting system at the Cantonal Hospital—University Hospital, Basel.]** *Veska*, Aarau, 1974, Oct., vol. 38, no. 10, pp. 545-550.

A new system for maintaining the current records of in-patients at the Cantonal and University Hospital, Basel, has been set up after a working party had made recom-

mendations. A file is opened for each in-patient to hold the following papers: temperature chart; report sheet (to give basic information on the patient); prescription sheet; anaesthesia sheet; monitoring report; sugar sheet; laboratory sheet (copies of forms which are retained in the laboratory); night sheet (for recording information for night staff and for night staff reporting to day staff); and anticoagulation sheet. All documents are of A4 size. On the cover of the file is a transparent envelope containing addressograph labels for affixing to forms. The files are kept on the ward in a container so that they are always accessible to nurses and doctors. The system is popular with staff. It is standard throughout the hospital and means that a complete record is always on the ward and can be readily transferred with the patient as necessary. Samples of the various forms are reproduced in the paper.

203. HILL, P. A. **Records, roles and results.** *Health and Social Service Journal*, London, 1974, Nov. 2, vol. 84, no. 4411, p. 2537.

Management by objectives has been tried in the medical records department of Southampton University Hospitals in order to overcome difficulties arising from a rapidly increasing work load, lack of resources and out of date accommodation and facilities. Deficiencies were identified and measured by informal discussion with nursing and medical records staff and major problem areas were highlighted. Comparison with performance elsewhere was difficult but arbitrary, optimistic targets were set and students were sent to other hospitals to make comparisons. The main objective, set in July 1971, was to raise the availability of medical records in clinics from 94.2 per cent to 99 per cent by Christmas. This target was achieved in November and by April 1972 a percentage of 99.89 was achieved. The performance of three other hospitals, one district general hospital and two London teaching hospitals, were measured for comparison and this has enabled realistic targets to be set. The essentials of the technique are: (i) identification of problem; (ii) measurement of performance; (iii) realistic target setting; (iv) analysis of obstacles; (v) improvement of performance; (vi) measurement of improvement; and (vii) continued monitoring to ensure maintenance of improvement.

204. JONES, B. E. and OULD, M. A. **The patient medical record as a database.** *Computer Journal*, London, 1974, Nov., vol. 17, no. 4, pp. 295-301.

A step towards an information system based on medical records was embodied in the aims of the medical computing project of King's College Hospital, London. The chief characteristics defined for the system were to be: (i) the storage of medical records containing both disciplined and unrestricted information; (ii) the handling of data flow around the hospital; and (iii) the gathering of statistics for a management information service. The data base needed to provide: (i) day-to-day medical information; (ii) a longer-term information storage system supporting the medical record for life and interfacing with all forms of medical care; and (iii) a base suitable for various types of clinical and administrative analysis. The data base design must take account of privacy and legality and it must be designed so that users can understand how it is organized. Four structural concepts with which the user must become familiar are: (i) the episode of medical care and the episode group; (ii) segmentation of episodes; (iii) summaries; and (iv) the front end (a group of statements including a condensed summary of past episode groups, personal medical data and on-going therapy). Technical objectives of the system include security, transparency, long-term compatability, contemporaneity,

manipulation and monitoring. Technical constraints are described under the headings: archives; accessibility; recovery of the on-line data base; and control of access to on-line data. The data base discussed needs a great deal of software to support it in the following area: housekeeping; archive maintenance; batch access; on-line data base recovery; and data manipulation. The formal structure of the proposed data base is set out in an appendix.

205. GRAHAM, R. C. **The Tayside master patient index—how and why.** *Hospital and Health Services Review*, London, 1974, Nov., vol. 70, no. 11, pp. 385-387.

The problems of integrating the records held by the local health authorities, executive councils and hospital boards brought together to form the new Tayside Health Board in Scotland led to a decision to set up a Master Patient Index. This consists of: (i) identification data; (ii) the Regional Unique Number which identifies an individual; and (iii) flags which indicate the existence and location of other records. The base master index is held on a computer but duplicates of it or part of it are available on other computers or on microfiche. Previous trial runs registering the patients in psychiatric hospitals (2,500 patients) and on the list of one general practitioner (3,500) indicated that bulk registration of groups of patients could be undertaken using ordinary clerical labour. The register was then extended by adding each new patient seen by the psychiatric services in the region and each birth in the City of Dundee. A grant from the Scottish Home and Health Department has made it possible to make a start on establishing the index for the whole population. The data held in the index is fundamental to every aspect of patient care, whether it be immediate clinical management or long-term planning and resource management. The author indicates how the information contained in it will be useful in planning health services and in running the family doctor and hospital services.

206. RYBACK, R. S. **The problem oriented record in psychiatry and mental care.** New York & London, Grune & Stratton, 1974, xi, 192pp. £6.00.

This volume first outlines the rationale of the problem-oriented medical record and the problems arising from its use in psychiatry. It then goes on to discuss the data base, problem formulation, treatment plans, follow-up data, chart review and audit, the mental health team and the problem-oriented record, resistances to changes in methods, special applications, relevance to the computer, professional standards review organizations and utilization review, and confidentiality. A problem-oriented case history is presented and appendices include lists of standardized problems, examples of problems lists, a short data base, examples of special data bases, examples of mental status examinations and a standardized treatment dictionary. A list of 135 references to the literature is also included.

207. PILLING, H. J. **Microfilming and computers.** *Hospital and Health Services Review*, London, 1974, Nov., vol. 70, no. 11, pp. 387-389.

Microfilm can now be produced direct from computer tape and its use is far quicker than having a print-out on paper. In Tayside, Scotland, microfilm is being used for health service purposes. The reduction is 43:1 which gives 208 pages of computer output on one fiche. The production apparatus costs from £20,000 to £40,000 but

computer bureaux are providing a 24/48 hour turn-round service at £7.00 per 1,000 notional computer pages. The price of microfiche readers ranges from £50 to £1,500. Considerable progress has been made in computerizing information from medical records and microfilming overcomes many difficulties such as the need for several copies at one application, the size of computer paper and its costs, and the need to abbreviate so much. For historical records information on microfilm is readily available at all times in several places so that on-line requirements are greatly reduced. A description is given of a typical system concerned with cervical cytology records in Tayside which illustrates the possibilities. In addition to the use of microfilm for medical records there are many financial applications suitable for the technique. Microfilming can replace hard copy in several ways at cheaper cost with less storage space and quicker access.

## HOSPITAL STATISTICS

208. JENNER, D., KEMPNER, V. A. and STOVELL, W. A. **The postcode and its application to Hospital Activity Analysis.** *Hospital and Health Services Review*, London, 1974, Dec., vol. 70, no. 12, pp. 432-433.

During the six months leading up to the reorganization of the National Health Service considerable use was made of Hospital Activity Analysis data in order to provide the various joint liaison committees with information on patient flows for the development of the district pattern in what is now the South East Thames Regional Health Authority. Coding for area of residence had been done using the code developed by the Office of Population Censuses and Surveys, but it was not detailed enough for the densely populated parts of the region and the postcode was therefore considered. The advantages of the postcode are: (i) it is not affected by changes in health or local authority district boundaries; (ii) all addresses have been allocated a postcode and over 50 per cent of patients already know their code; and (iii) it can provide a rudimentary form of record linkage between hospitals. The project has now been implemented and is regularly reviewed and updated.

## PUBLIC RELATIONS

209. DUKE UNIVERSITY. GRADUATE PROGRAM IN HEALTH ADMINISTRATION. **The citizenry and the hospital: a report of the 1973 National Forum.** Durham, N.C., Duke University Department of Health Administration, 1974, viii, 178pp.

At present United States hospitals are not required legally to provide for any degree of community participation; it is unlikely that any such legal requirements will be imposed. The papers at this Forum, which represent the best published thinking on the subject, indicate that hospitals are nevertheless recognizing moral and market reasons for such participation. The crucial problem is how to do it; it becomes evident from the papers that no satisfactory means has been developed in any other field for direct involvement of the individual or community in the affairs of governmental or non-profit institutions. But full recognition of the need should cause hospitals to be more responsive to community needs and aspirations.

## OTHER SPECIAL ASPECTS

210. SHAW, J. E. **Commissioning at Southampton.** *Health and Social Service Journal*, London, 1974, Nov. 30, vol. 84, no. 4415, pp. 2774-2775.

The first phase of the redevelopment of Southampton General Hospital as a teaching hospital consists of a 325-bed ward block, accident department, five operating theatres and two out-patient departments. The full-time members of the commissioning team were a nurse and an administrator (who subsequently became principal nursing officer and administrator, East Wing). They participated with medical and nursing staff of each unit due to move into the wing in a series of multidisciplinary user groups. These groups were responsible for most of the detailed operational policy preparation, equipment specification and determination of unit management policy. Two other groups completed the commissioning framework: (i) key managers—20 nursing officers and heads of paramedical and support services with key roles in making their respective services operational; and (ii) the commissioning team of officers having key roles in staffing, equipping, publicity, finance, research and operational policy preparation. The paper discusses lessons learned after sessions to review the commissioning of this building and to identify the successes and mistakes, in order to improve the process in subsequent phases.

# FINANCE AND ACCOUNTING

## FINANCE

See also Abstract No. 174

211. CARUANA, A. R. **A guide to organizing the hospital's fiscal services division, with job descriptions for key functions.** Chicago, Hospital Financial Management Association, 1974, vii, 64pp. $6.00.

This manual presents an organizational structure, position titles and job descriptions for a hospital's fiscal services division; it is based on a theoretical model of a relatively large acute care, teaching and research hospital. It has four chapters: the hospital's fiscal services division; the controller's department; the data processing department; and the admitting department.

212. GENZEL, H. Die Krankenhausfinanzierung in Bayern. **[Hospital finance in Bavaria].** *Krankenhausarzt*, Karlsruhe, 1974, Oct., vol. 47, no. 10, pp. 559, 562, 564-566, 568-569, 572.

Recent West German legislation on the financing of hospital services is discussed with particular reference for the problems it raises for Bavarian hospitals. Bavaria has the largest area of any of the *Ländes* and its sparsely inhabited districts make it necessary for smaller hospitals to be retained. An analysis of the finances likely to be available for hospitals in Bavaria shows that the annual sum for capital expenditure of DM 200 million would, even at the low estimate of DM 125,000 per bed, only provide 1,600 beds whereas the estimated number of new beds required annually is 2,750. Hospital statistics for Bavaria as at 1 January 1972 are set out in a series of tables.

213. TELFER, G. A. **The short-cut approach to preparing budget reports.** *Hospital Financial Management*, Chicago, 1974, Oct., vol. 28, no. 10, pp. 20-21.

This paper describes a reusable form for sending regular reports of budget variances to departmental managers. The master is updated by hand, reproduced on an electrostatic copier and distributed to administration and department managers only. The basic form is applicable to all departments. Department titles and account headings are written in according to departmental requirements. The upper half of the form shows actual monthly figures, the lower half budget figures for the year and for the month. The bottom line indicates total departmental variance from budget for each month. The far right-hand column shows variances for each account detail for the year to date. An example of the form is reproduced and the steps in the monthly updating are outlined.

214. DOWLING, W. L. **Prospective reimbursement of hospitals.** *Inquiry*, Chicago, 1974, Sept., vol. 11, no. 3, pp. 163-180.

Prospective reimbursement is a method of paying hospitals in which: (i) amounts or rates of payment are established in advance for the coming year; and (ii) hospitals are paid these amounts or rates regardless of the costs they actually incur. It shifts some of the risk for costs from third-party payers to hospitals in contrast to retrospective cost reimbursement where payers assume the risk for what hospitals spend. It has been suggested that an effective reimbursement system must meet two tests: (i) it must make hospitals viable; and (ii) it must motivate hospitals to be efficient and thus contain costs. The two components of reimbursement are the payment unit and the method of controlling or determining the amount to be paid per unit. The author discusses at some length the alternative payment units and methods of rate setting. Bases of payment or payment units might be: (i) total hospital budget; (ii) departmental budgets; (iii) capitation; (iv) episode of illness; (v) case or stay; (vi) day; or (vii) specific services. All of these except (iv) have been used or are being considered in reimbursement schemes. Points considered in relation to rate-setting methods are: uniform versus individual hospital rates; co-operative versus competitive processes; the delegation of control or responsibility by government; administrative feasibility; and acceptability to hospitals. Four illustrative tables are included and 19 references are listed.

# SUPPLIES AND STORES

## STORES

See Abstract Nos. 159, 265

# CATERING, DIETETICS, KITCHENS

## HOSPITAL CATERING

215. **Catering: control of food costs.** (Abstracts of Efficiency Studies in the Hospital Service, No. 168) London, Her Majesty's Stationery Office, 1974, [14]pp. £0.10.

This abstract describes a system which has been evolved for controlling food costs

throughout the King's College Hospital group. It includes monthly patient opinion surveys, staff dining-room sales forecasting, and standardization of recipes, menus, ingredient costs, stores and ward issues. The new system, which has been working satisfactorily for some two years, enables the weekly food costs to be supplied to the group catering manager and catering unit officer within five days. In one hospital in the group, there has been a saving, after taking account of price increases, of at least 10 per cent on catering costs, although the patient population has increased by two per cent. Examples of the forms used are reproduced and a table showing group catering provisions costs for 1970/71, 1971/72 and 1972/73 is included.

216. FREEMAN, R. **Food service: the challenge of cost control.** *Dimensions in Health Service*, Toronto, 1974, Nov., vol. 51, no. 11, pp. 43-45.

New food systems have been developed to reduce the cost of food production and service, but reductions can also be made by integrating new and practical techniques into conventional food service. Food costs can be cut in various ways. Nutritious menus can be planned, using both expensive and cheap foods, which can be easily prepared to produce high quality meals. Under- or over-ordering of food can prove both expensive and very inconvenient, so reliable supplies should always be used. Similarly, checking of orders for correct items and to ensure quality is vital. Once in the institution, suitable storage and preparation of food using the right equipment saves time and money, and the use of left-overs must be considered. All these factors must be continuously evaluated if cost reduction is to be effective. Efficient staff management can also cut costs. Staff must be carefully chosen and the centralization of services can ensure the effective use of labour resources. Other factors such as the use of convenience foods can help to ensure that food is freshly but rapidly prepared to a high standard.

217. WARTA, A. Computerunterstützte Speisenplanung und Küchenverwaltung. **[Computer-aided meal planning and kitchen administration.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1974, Oct., vol. 15, no. 10, pp. 535-540.

A computer-based catering service for the 600 patients and 400 staff of the Salzburg special hospital for psychiatry, neurology, neurosurgery and neurogeriatrics is being introduced in stages. It is known as computer assisted menu planning (CAMP) and has three main components: basic processing program (data on foodstuffs, nutrients and recipes, kept up-to-date); on-line program; and menu planning program. The practical application of the system divides under four heads: setting up a catering plan; disposition of foodstuffs for the next week; daily supply of the kitchen with food; and continuing control of foodstuff and costs.

218. BALL, R. Kochfabrik—ja oder nein? **[Cooking factory—yes or no?]** *Österreichische Krankenhaus-Zeitung*, Wien, 1974, Oct., vol. 15, no. 10, pp. 540-542, 545-546.

A study at a Karlsruhe Hospital has shown that a catering system using deep-frozen food only saves 25 per cent of the labour necessary for a conventional system. Catering relying solely on deep-frozen food—either bought commercially or prepared in the hospital kitchen—can be too rigid: the ideal system should be a combination of frozen and freshly prepared dishes and one that can be varied to meet differing needs. The 'Vari-serv' system is recommended as meeting these requirements [but is not described in the paper].

# LAUNDRIES AND LINEN SERVICE

## LAUNDRIES

219. BELLINGER, H. and GRUND, H. Hygienisch einwandfreie Krankenhauswäsche —ein gelöstes Problem. **[Hygienically perfect hospital laundering—a problem solved.]** *Krankenhausarzt*, Karlsruhe, 1974, Oct., vol. 47, no. 10, pp. 592-600.

The authors describe current laundry procedures for hospital work with special reference to hygienic requirements and efficient disinfection. The various types of washing machines (conventional, combined washing machines and dryers, continuous flow, counterflow, etc.) are described and illustrated and their main features outlined. The disinfection of hospital laundry is combined with the washing process and the principal techniques are explained. It is important that newly washed and disinfected linen should be protected from re-infection before it is used again. While disposable 'linen' has advantages from the point of view of hygiene it is probably more expensive in the long run and it greatly increases waste disposal problems.

## HOSPITAL LINEN AND TEXTILES

220. **Linen services: packing of linen.** (Abstracts of Efficiency Studies in the Hospital Service, No. 166) London, Her Majesty's Stationery Office, 1974, 1p. £0.3½.

In the Coventry group of hospitals linen was packed in polythene sheets which were heat-sealed to make air-tight unit packs. These were placed in aluminium containers for dispatch to linen banks. The heat-sealed polythene packs were costly in labour and materials and had only marginal handling advantages. Following a study of the costs and relative merits of other packing methods, polythene heat-sealing was discontinued. The aluminium containers were sprayed with a lacquer, which was expected to provide suitable protection against soiling by oxidized aluminium deposits for up to five years. 'Customer' packs were made up in the aluminium containers which were placed in pairs four high on trolleys, and a canvas cover was placed over the top to protect the linen from inclement weather. Delivery and collection of linen was operated on an exchange trolley basis. In use for two years, the system has proved satisfactory, but where other containers are not already in use, heavy duty polythene type containers are to be preferred.

# HOSPITAL DOMESTIC MANAGEMENT

## DOMESTIC WORK

221. **Hospital cleaning.** *Health and Social Service Journal*, London, 1974, Nov. 30, vol. 84, no. 4415, supplement, pp. 3-7, 12, 14-16.

This supplement includes brief papers on: the impact of reorganization on domestic administration; ward housekeeping service in Derbyshire hospitals; questions to be

considered when selecting techniques for floor cleaning; future staffing of cleaning services; and cleaning as a disinfecting process.

# HYGIENE IN THE HOSPITAL

## HOSPITAL INFECTIONS

222. PATTISON, C. P. and others. **Epidemic hepatitis in a clinical laboratory: possible association with computer card handling.** *Journal of the American Medical Association*, Chicago, 1974, Nov. 11, vol. 230, no. 6, pp. 854-857.

During a six-month period, five laboratory staff in a 500-bed general hospital developed hepatitis; in the previous two years only one laboratory employee had had overt hepatitis. Risk-factor analysis for ill employees and a matched control group showed that only a history of sustaining cuts while handling laboratory requisitions (computer cards) was statistically significant. Lack of cases since the outbreak is probably due to: (i) awareness of staff to the probable cause of the epidemic; (ii) adoption of techniques to minimize the hazards of collecting and processing hepatitis B surface antigen specimens; (iii) reduction in the number of susceptible specimen-control staff as the outbreak progressed; and (iv) functional improvement in the computer system, with a consequent decrease in the number of cards handled by specimen-control staff.

## SOURCES OF INFECTION

See Abstract No. 222

## PREVENTION AND CONTROL

223. INTERNATIONAL COMMITTEE OF CONTAMINATION CONTROL SOCIETIES. **International symposium on contamination control, London, 1974: proceedings, edited by Sam Black.** London, Sam Black Organisation, 1974, 164pp. £10.00.

Of the 44 papers given at this symposium, 24 are directly concerned with the control of contamination in hospitals, with particular reference to operating theatres and sterile nursing units.

224. SHOJI, K. T., AXNICK, K. and RYTEL, M. W. **Infections and antibiotic use in a large municipal hospital 1970-1972: a prospective analysis of the effectiveness of a continuous surveillance program.** *Health Laboratory Science*, Washington, D.C., 1974, Oct., vol. 11, no. 4, pp. 283-292.

A prospective analysis of hospital infection rates was undertaken before and after the establishment of control measures at Milwaukee County General Hospital. These measures included surveillance by a nurse epidemiologist, enforcement of isolation policies and establishment of in-service training. Hospital infection rates declined from 14 per cent before inception of the programme to 7.6 per cent two years after. An absolute and a relative decrease was noted in the rates of the major types of infection—urinary and respiratory tracts and wound. Gram-negative bacilli, enterococci and staphylococci were persistently the most prevalent pathogens. Ampicillin remained the

most frequently used single antibiotic, but the use of gentamicin increased significantly. Surgery and gynaecology had higher infection rates than medicine. It is concluded that an infection control programme can effect a significant reduction in hospital infection rates.

## HYGIENE IN THE OPERATING THEATRE

See also Abstract No. 251

225. AGLIETTI, P. and others. **Effect of a surgical horizontal unidirectional filtered air flow unit on wound bacterial contamination and wound healing.** *Clinical Orthopaedics and Related Research*, Philadelphia, 1974, June, no. 101, pp. 99-104.

This paper reports a study to determine the efficacy of an horizontal air flow unit in reducing the amount of air and wound contamination. The study consisted of three groups of comparable total hip replacement procedures. It demonstrated that less contamination occurred in wounds, drapes and gowns of consecutive total hip replacements when performed in an enclosure with horizontal unidirectional filtered air flow, compared with a series performed in operating theatres without an enclosure and air flow. The air flowing over the wounds of patients operated upon in the enclosure with horizontal unidirectional filtered air flow in use was bacteriologically five-fold cleaner than air near the wound in the enclosure without air flow. Within the enclosure, cultures of wounds before closure showed significantly less contamination, when horizontal unidirectional filtered air flow was used, than when it was not used. The organisms most frequently recovered in these studies were coagulase negative staphylococci.

## STERILIZATION

226. NEWSOM, S. W. B. and WALSINGHAM, B. M. **Sterilization of the biological safety cabinet.** *Journal of Clinical Pathology*, London, 1974, Nov., vol. 27, no. 11, pp. 921-924.

This paper describes a comparative trial of methods of sterilization in the various biological safety cabinets currently available. Exposure to formalin from a bowl, boiling excess formalin with the fan running, and ultraviolet irradiation were all found to be unreliable, as was glutaraldehyde. Vaporization of 2.00 ml. of formalin per 0.028 cu.m. followed by exposure for 18 hours at ambient temperatures was 100 per cent successful, and depolymerization of paraformaldehyde tablets with a hair drier was a simple, very effective alternative method.

227. STREICHER, E. and HINTENACH, D. Hitzesterilisierbares rezirkulations-hämodialysesystem. **[Heat-sterilizable recirculation-haemodialysis system: comparison of chemical and thermal disinfection.]** *Medizinische Welt*, Stuttgart, 1974, vol. 25, no. 13, pp. 545-547.

Although it is generally considered that sterilization by heat is to be preferred to chemical sterilization there is no haemodialysis recirculation system on the market which can be heat-sterilized. Such a system has however been produced at the Katharine Hospital, Stuttgart, and is here described and illustrated. A series of experiments with this equipment shows that chemical sterilization is far less effective in reducing the

bacterial count than is heat sterilization with boiling water. And while the micro-organisms found after chemical sterilization included *Escherichia coli*, *B. alcaligenes faecalis*, Citrobacter and Enterobacter, only the latter was found after heat sterilization.

228. MALLISON, G. F. and STANDARD, P. G. **Safe storage times for sterile packs.** *Hospitals*, Chicago, 1974, Oct. 16, vol. 48, no. 20, pp. 77-78, 80.

In order to provide information on the safe storage of sterile packs a number of studies were conducted under actual hospital storage conditions on several wrappers and combinations of wrappers as follows: a 140-thread-count muslin; a two-way crepe paper; a tightly woven (272-thread-count with a two-ply warp) pima cotton cloth; and a sterile three mil polyethylene bag over a muslin wrapper. The muslin wrappers were washed and ironed up to 10 times before use and the cotton, which had a water repellent finish, up to three times. All wrappers were about 24 inches square and the test pack (20 two-inch square gauze sponges) measured about eight by 10 inches by one inch. The wrapped packs were sealed with autoclave tape and were sterilized in the laboratory in a conventional steam autoclave. The sterility of the test packs was checked by using a highly resistant spore-test indicator and by microbiological culturing. The packs were put into plastic bags and taken to nearby hospitals where they were taken from the bags and stored either on open shelves or in closed cabinets. They were then picked up at random daily for the first week in some studies and weekly thereafter. A table summarizes the results for different wrappers or combinations of wrappers. Recommendations arising from the results of the studies were: (i) the use of single-wrapped muslin (two layers) packs is not recommended; (ii) closed cabinets are preferable to open shelves; and (iii) long-term sterile storage is possible if the packs are sealed in sterile plastic bags.

### AIR HYGIENE

229. LANGLEY, D. R. and STEWARD, A. **The effect of ventilation system design on air contamination with halothane in operating theatres.** *British Journal of Anaesthesia*, London, 1974, Oct., vol. 46, no. 10, pp. 736-741.

This study demonstrates the concentrations and distribution of halothane in the air of three operating theatres, with different ventilation systems, during their routine use. The results show that in all the theatres there was a spread of halothane from its point of escape from the anaesthetic circuit to all parts of the theatre air. A turbulent flow ventilation system produced an uneven spread with the greatest concentrations in the zone of air breathed by standing staff. A downward displacement system produced a more even spread throughout the theatre, but with a much reduced general level of pollution.

## SAFETY MEASURES

### FIRES AND FIRE PREVENTION

230. BERGER, K. Die Alarmorganisation im Spital. **[The hospital alarm organization.]** *Veska*, Aarau, 1974, Oct., vol. 38, no. 10, pp. 564-566.

The commandant of the Basel City Fire Service here gives his views on the fire prevention and fire fighting measures necessary for hospitals. Among the recom-

mendations are the following: sufficient and suitable hand extinguishers; wall hydrants; fire alarm installations; ward-clearing exercises for staff; special instructions for clearing intensive care areas; a designated officer to be responsible for regular inspection of equipment and to see that all proper precautions are maintained; a hospital fire-fighting team, with deputies, in medium-sized and large hospitals; and an alarm organization. The internal fire alarm system should be linked with the telephone and fire instructions should be displayed in staff rooms. A check list of measures to be taken is included in the paper.

# THE PATIENT

## ADMISSION AND RECEPTION

231. FLÓR, F. and KÖVESI, E. A betegfelvétellel és a betegekkel kapcsolatos egyes ügyviteli folyamatok egyszerüsitése. **[Administrative rationalization of some hospital admission procedures.]** *Egészségügyi Gazdasági Szemle*, Budapest, 1974, Sept., vol. 12, no. 3, pp. 363-387; summaries in Russian, English and German, pp. 387-388.

This paper discusses the simplification of the administrative processes of patient admission. The authors propose a system which could be applied uniformly in all hospitals, with considerable saving of staff time, following proper pilot studies and careful analysis of results. It involves the use of addressing machines and reconsideration of about 40 documents.

## WELFARE OF THE PATIENT

See also Abstract Nos. 297, 298

232. LEVITT, R. **Communications in hospitals: what the patient thinks.** *Health and Social Service Journal*, London, 1974, Nov. 2, vol. 84, no. 4411, pp. 2532-2533.

In a study of patients' attitudes to treatment and care at the new Charing Cross Hospital, London, the author interviewed 200 patients at length. It was clear that the widespread good humour and tolerance of patients is in fact a sophisticated device for avoiding anxiety, fear or depression. All the patients interviewed were genuinely grateful for the care received and most said it was difficult to think of improvements. On becoming an in-patient people tend to give up their freedom and autonomy and hand over to others the responsibility for making decisions about their bodies. This dependence leads staff to think that the patient need only be given information if he asks for it. There was some misunderstanding between patients and nurses with regard to the use of the call button on the bedside console. Many patients thought they should use this only in an emergency but nurses thought they should press it whenever they need anything. Doctors should realize that a patient's silence may not indicate his complete satisfaction and they and nurses should understand that the

hospital can be an intimidating place to patients. Conclusions to be drawn from the study are: (i) patients' attitudes can be understood better by sensitive interviewing than by questionnaires; (ii) patients will talk in the interview about matters which the staff might not have recognized; (iii) the enormous amount of goodwill in the hospital setting provides an excellent basis on which to explore and develop communications; and (iv) the results of such studies should be seriously considered in relation to the training of doctors and nurses.

233. TAYLOR, R. **Noise in hospitals.** *Health and Social Service Journal*, London, 1974, Nov. 30, vol. 84, no. 4415, pp. 2770-2771.

Surveys about noise in hospitals often show 20 per cent of patients are unconcerned, but equally there is another 20 per cent who are seriously disturbed by noise. Not all noise is bad. Long-stay patients are often glad of the link with the outside world which traffic and other external noises provide. A steady background noise provides some privacy. It is less the level of the noise itself that affects people than the meaning of the noise. Unnecessary (although slight) noise injures a sick person much more than necessary noise (of a much greater amount). Noise in hospitals lies not so much with the buildings as with the people in them and is due above all to carelessness and thoughtlessness. Some noise is nevertheless caused by the design of the buildings or the equipment. Preventive measures include better sound insulation, sound absorbent ceilings, proper maintenance of trolleys, and attention to a host of other small and technically simple points. Three courses of action requiring little or no expenditure are: an effective educational programme, declaration of strict rest periods, and establishment of low noise wards for particularly sensitive patients.

## THE GENERAL PRACTITIONER AND HIS PATIENTS

See also Abstract No. 155

234. LONG, A. and ATKINS, J. B. **Communications between general practitioners and consultants.** *British Medical Journal*, London, 1974, Nov. 23, vol. iv, pp. 456-459.

During 1972-3 a survey was made of the pattern of communication between 80 consultants in four hospitals in south-east England and 100 general practitioners (GPs) in the catchment areas of these hospitals. It aimed to identify the factors which affect the efficiency of communication between these two groups and to look for ways of improving this. The results of the survey are set out in tables which show that face to face contact between consultants and GPs was limited. Letters of referral and discharge provided the main method of communication, but this system too has defects. Communications were in general felt to be satisfactory but the evidence suggested that they could be improved by: the development of hospitals staffed by GPs with consultants in an advisory role; an increase in the use made of domiciliary visits with both doctors present; and the development of consultant sessions at health centres. These innovations would however depend for their success on the whole-hearted support of GPs and consultants alike.

## HOSPITAL CARE

See also Abstract Nos. 193, 200, 278, 299-301

235. KRAEGEL, J. M. and others. **Patient care systems.** Philadelphia, Lippincott, 1974, xi, 219pp. £5.50

The purpose of this book is to extend the science of design to the health care field and to present a rational approach to the planning and design of the complex systems of health care in meeting patient needs. The book is based on a three-year research project conducted under the auspices of the School of Nursing, University of Wisconsin —Milwaukee. The first two chapters discuss the fragmentation of health care and make proposals for an integrated approach. The next four chapters show how patient-centred purpose for design uncovers patients' needs, reveals vital information requirements, organizes a care planning system and suggests the type of environment needed to meet patient needs. Chapters seven to 10 discuss the methodology and concepts which are necessary if all health care systems and their components are to operate as a unified whole based on a common purpose, to meet patient needs. The implications of designing patient care systems based on the purpose of meeting patient needs is discussed in the last two chapters.

236. CHICAGO. UNIVERSITY. GRADUATE PROGRAM IN HOSPITAL ADMINISTRATION. **The hospital's role in assessing the quality of medical care: proceedings of the Fifteenth Annual Symposium on Hospital Affairs May 1973.** Chicago, Graduate Program in Hospital Administration, University of Chicago, [1973], 101pp. $6.50

This symposium brought together administrators, teachers, planners and students to define and analyse accountability in the area of medical services which are rendered. Papers were given on: the importance of obtaining high quality medical care; assessing the quality of patient care; health accounting and outcome measures of the quality of care; the most appropriate method for peer review; administrative implications of the problem-oriented medical record; and the administrator's role in quality assessment. Also included are reports of panel discussions on the state of quality of care assessment and on possible future developments, and a selected annotated bibliography on the quality of medical care.

237. FIELDING, J. E. **PSROs: a cooperative effort to improve the quality of care.** *Hospital Medical Staff*, Chicago, 1974, Sept., vol. 3, no. 9, pp. 2-8.

The Professional Standards Review Organization (PSRO) programme, planned by the U.S. Department of Health, Education and Welfare, is described. It aims to concentrate the responsibility for the quality of medical care at the level of local practitioners. PSROs in the 203 designated PSRO areas may soon be financed from federal funds. By law, only a non-profit-making professional association representing practising doctors (or another suitable designated organization after 1976) in one geographical area, can apply to be the area's PSRO. Different PSRO contracts have already been granted to planned, existing, and state level organizations applying to be statewide PSRO support centres. PSROs review institutional care provided to beneficiaries of Medicare, Medicaid and Maternal and Child Health programmes.

Ambulatory care may also be reviewed. In a short-stay general hospital PSROs operate: (i) a concurrent review mechanism ensuring the necessity of hospital admissions; (ii) medical care evaluation studies; and (iii) profile development and analysis studies. PSROs are aided in this work by hospital review committees, and studies involving several hospitals can be made. Plans to involve PSROs in long-stay care evaluation are also being developed. Real involvement of local practitioners is crucial if care facilities are to remain patient-oriented.

238. GONNELLA, J. S. and ZELEZNIK, C. **Factors involved in comprehensive patient care evaluation.** *Medical Care*, Philadelphia, 1974, Nov., vol. 12, no. 11, pp. 928-934.

Current activities in patient care evaluation may be criticized as follows: (i) deficiencies tend to be identified only in relation to the physician's responsibility for unsatisfactory outcomes; and (ii) analysis of outcomes does not take into account possible preventive measures and how these problems affect the lives of others. A matrix is suggested which will direct attention to all the factors which contribute to the quality of care, and which may aid statistical analysis in the field of patient care evaluation. The matrix is a two-dimensional one including on the one hand different elements in the final outcome, and on the other hand the factors which contribute to these outcomes. These factors are: (i) the contribution of the physician; (ii) the contribution of the hospital or health care service; (iii) the contribution of the patient himself; and (iv) the contribution of the social and physical environment. A theoretical example demonstrates the matrix for acute myocardial infarction while case histories of inappropriate conclusions are given to illustrate the problems which may result from failure to consider all the relevant factors.

239. HAUSSMANN, R. K. D. and others. **Monitoring quality of nursing care.** *Health Services Research*, Chicago, 1974, vol. 9, no. 2, pp. 135-148.

A study was undertaken in the United States to design an improved framework for monitoring the quality of nursing care by: (i) synthesizing and incorporating the best elements from existing methodologies and available research; (ii) establishing a conceptual framework for the nursing care process independent of existing criteria; (iii) designing an observation and scoring methodology, using the set of criteria developed within this framework that would maximize measurement efficiency and minimize bias; and (iv) testing this methodology and refining criteria by statistical analysis aimed at assessing criteria reliability and redundancy. Two hospitals were used as initial test sites in the study: Presbyterian—St Lukes's, Chicago, and the Montclair Hospital of the Baptist Medical Center, Birmingham, Ala. In their paper the authors describe the approach that was taken in the development of the methodology, present the methodology as it now exists, and outline remaining problems with its use and the further experimentation that is now going on. Several tables and graphs are included.

240. **Symposium on quality assurance.** *Nursing Clinics of North America*, Philadelphia, 1974, June, vol. 9, no. 2, pp. 303-386.

The papers in this symposium illustrate the contributors' commitment to the development of outcome criteria for quality assurance programmes and some of the

results of their work. They demonstrate that the development and use of patient health/wellness outcome criteria to evaluate the quality of patient care is practical.

241. THOMPSON, R. E. **Medical care evaluation studies: the crux of quality.** *Hospital Medical Staff*, Chicago, 1974, Sept., vol. 3, no. 9, pp. 11-15.

Medical care evaluation studies are defined as 'after the fact' reviews of care of groups of patients for the purpose of evaluating the quality of care received. They form an important part of the work of Professional Standards Review Organizations (PSROs) in the United States. Review of utilization, involving the costing of different types of care must not be confused with quality evaluation, to which it is complementary. Costing must be analysed concurrently with the patient's treatment, and an analysis of the patient's well-being is not of primary importance. Medical care evaluation must however be made after treatment is completed. Such reviews must use acceptable criteria. These are: (i) the element of the study, i.e. a clinical report showing the patient's physical condition; (ii) the standard of care given, which is ideally 100 per cent; (iii) exceptions to usual care, particularly if previous treatment was given for the condition; and (iv) instructions, resulting from clinical or other reports.

242. LEWIS, C. E. **The state of the art of quality assessment—1973.** *Medical Care*, Philadelphia, 1974, Oct., vol. 12, no. 10, pp. 799-806.

A brief survey of the development of quality of care assessment in the 20th century shows that it was started by physicians as a result of studies on the quality of medical education. Later the focus was on the standardization and improvement of medical records. Most recently the medical audit and other methods are concerned with the assessment of 'outcomes'. The problems which arise in assessing the quality of care are not just technical or methodological. A surveillance programme may result in numbers but these units can only be interpreted in terms of social values. It is essential to separate the numbers resulting from quality of care studies from their social implications.

243. SCHICKE, R. K. Die Bewertung gesundheitlicher Leistungen in den USA: Trends und Problematik. **[The evaluation of health care performance in the USA: trends and problems.]** *Krankenhausarzt*, Karlsruhe, 1974, Oct., vol. 47, no. 10, pp. 572, 574-576, 581-582, 584, 586-587.

A detailed study of methods and techniques for the assessment of the quality of health care in the United States is presented, with a review of published work and 46 references to the literature. The subject is dealt with under the following heads: introduction and historical sketch; qualitative aspects of training and further training; use control and its socio-economic and medical aspects; methodological problems of the measurement of quality; and voluntary and statutory control and performance evaluation.

244. FIFER, W. R. and ELLSWORTH, S. J. **A shared medical audit program for small hospitals—meeting the demands for accountability.** *Hospital Medical Staff*, Chicago, 1974, Oct., vol. 3, no. 10, pp. 1-10.

This paper outlines some of the conceptual and operational problems associated with implementing effective quality control in small hospitals. It then describes the

regional shared medical audit programme for small hospitals which has been developed by the University of Minnesota's Area Health Education Center. The methodology, standard setting and committee structure and data retrieval are described. At present, 15 small hospitals are taking part in the programme. Two audits (appendicectomy and pneumonia) have been completed and a third (cholecystectomy) is well under way. It appears that a regional shared medical audit programme is feasible and well accepted in small hospitals; in addition, it offers them workable solutions to many of the problems inherent in smallness.

245. MASON, A. M. S. and SIMPSON, P. **Medical audits.** *Hospital Update*, London, 1974, Dec., pp. 779-782, 784.

The type of medical work review which concentrates on stopping remuneration for unnecessary work is not needed in the context of a National Health Service. The aim of evaluation studies in the United Kingdom should be to ensure better medical care for individual patients, and the best use of health service facilities for a population. In setting up a study to evaluate medical care four basic questions should be asked: (i) What is being evaluated?; (ii) Who is doing the evaluating?; (iii) How is the evaluation being carried out?; and (iv) Against what is it being evaluated? These questions are discussed and specific examples of studies are outlined, including use of the intravenous pyelogram in patients with hypertension, day case surgery, consultant consultations in a health centre, and management of patients with myocardial infarction.

246. THOMPSON, H. C. and OSBORNE, C. E. **Development of criteria for quality assurance of ambulatory child health care.** *Medical Care*, Philadelphia, 1974, Oct., vol. 12, no. 10, pp. 807-827.

The technique used by the Joint Committee on Quality Assurance (representing eight medical and health organizations) for the selection, development and validation of criteria for assessing the health supervision of children in four age-groups, and the ambulatory management of urinary tract infection, bronchial asthma, and tonsillopharyngitis is described. After a preliminary list had been assessed by a national panel of 388 experts a final list of 138 criteria was drawn up. The differences between the preliminary list and the final one suggest that only those accustomed to the formulation of criteria should be given such an important task. A comparison of the initial and final ratings are set out in a table.

## DISCHARGE OF PATIENTS

247. BARHAM, F. L. **Tentative program improves utilization.** *Hospitals*, Chicago, 1974, Oct. 16, vol. 48, no. 20, pp. 83-84.

A tentative discharge plan has been developed at the Medical Center, Princeton, N.J. This is simple, effective and flexible and makes the decision on discharge the responsibility of the attending physician. A stamp is put on the doctor's order sheet and the charts of all medical, surgical and paediatric patients; it is dated by the ward clerk on the third day of the patient's stay. Five choices are set out on the stamp: (i) extended care facility; (ii) home care programme; (iii) Princeton Hospital services not anticipated after discharge; (iv) re-evaluate in so many days, the number to be

filled in; and (v) social services consultation. The attending doctor indicates one of these choices not later than the sixth hospital day. He signs and dates the stamp imprint and this becomes an order. If a change in a patient's condition necessitates a transfer to another unit the order sheet is re-stamped on the third day in the new area. If (i) or (ii) is chosen all appropriate staff, departments and agencies are notified so that preparation can be made for the anticipated discharge. Category (iii) is used for patients with fairly minor conditions unlikely to need any follow-up and category (iv) allows flexibility in uncertain clinical situations. The system has encouraged the use of alternative levels of care and has led to a decrease in the overall length of stay by about 0.3 days. It has also brought about more referrals to the social service department and eliminated the crisis discharge situation, often experienced before. [This paper also appears in: *Hospital Medical Staff*, Chicago, 1974, Oct., vol. 3, no. 10, pp. 30-33.]

## HOME CARE, AFTER-CARE

See also Abstract Nos. 302, 306, 307

248. ALLEN, D. V. and others. **Agencies' perceptions of factors affecting home care referral.** *Medical Care*, Philadelphia, 1974, Oct., vol. 12, no. 10, pp. 828-844.

Questionnaires on the factors affecting the referral of hospital in-patients to the home care service of the Visiting Nurse Association of Metropolitan Detroit (DVNA) were returned by 358 members of the staff (doctors, nurses, paramedical staff and social workers) of the DVNA and three hospitals. Questions were asked on 19 specific factors relating to the home care service, and the respondents' knowledge of them, and the answers are analysed in a series of tables. These indicate a generally favourable attitude towards home care in spite of the fact that there was considerable lack of knowledge about the scheme, particularly with regard to services not provided by the DVNA. Five factors were shown to be important sources of dissatisfaction: the quality of care; feedback; transport; emergency assistance; and administrative support.

249. CLARKE, F. **Into Europe: hospital at home.** *Social Work Today*, Birmingham, 1974, Oct. 3, vol. 5, no. 13, pp. 387-389.

This paper describes a statutory centralized service of home care in Paris (Hospitalisation à Domicile) for patients normally needing hospital treatment but opting to be cared for at home. The service comes under the Assistance Publique but has its own budget, policy, management and administration. It represents an annual economy to the value of a new 1,000-bed hospital every five years. The service operates through multidisciplinary teams, each based at a hospital and serving a defined area. Each team, which covers 50 to 80 patients, consists of a social worker, a nursing supervisor, 10 nurses and eight nursing aides and home helps. The scheme provides for total patient care and covers all age groups and a wide variety of conditions. It is especially valuable in the care of children and old people and is based on the concept that the home environment is an important factor in maximum recovery. Criteria for participation in the service are: the patient and responsible relatives must be willing; the general practitioner must agree to visit twice a week and the consultant once a

fortnight; immediate hospital readmission must be possible if necessary; and the patient should not need more than three hours nursing and two hours home help daily. The key position of the social worker is emphasized and there is a description of just how the scheme operates. The possibility of such a scheme working in Britain is considered.

# SPECIAL DEPARTMENTS

## WARDS

250. SHAW, J. E. **Information rooms—decentralised unit management.** *Health and Social Service Journal*, London, 1974, Dec. 7, vol. 84, no. 4416, p. 2831.

The East Wing of Southampton General Hospital is a ward block with 450 beds consisting of three standard regional 120-bed nursing units and a 93-bed children's unit. Research was undertaken into the best way of managing such large nursing units and the idea of a unit information room was developed. Information rooms have been described as 'glorified admissions offices', 'patient care administration on the ward' and 'central inquiry points'. Their original purpose was to regulate the unit's admission policy, controlling non-emergency admissions and balancing the resources of beds, theatres and staff. The system makes essential the bringing together on a routine daily basis of the nursing officer, senior registrar or SRO and the officer in charge of the information room for joint decision-making on the running of the unit. The information room provides information for day-to-day management and for policy decisions. It also provides statistical and other information for *ad hoc* inquiries or surveys. For medical staff one great advantage is that decisions on admissions, transfers and discharges can be made with reliable information. Areas needing attention (e.g. blocked beds) can be pin-pointed and changes in work load or practice can be monitored. Nurses welcome the daily contact with the senior registrar and the opportunity to match the work load to the staff available. Effective local management improves communications and morale and reduces local crises. The cost of the information rooms is rather high but they relieve the work load of other departments.

## OPERATING SUITES

See also Abstract Nos. 225, 229

251. **Symposium on operating room environment, Barcelona, September 26th, 1973.** *Bulletin de la Société Internationale de Chirurgie*, Bruxelles, 1974, Jan./Feb., vol. 33, no. 1, pp. 1-66.

The papers at this symposium were concerned with: architectural and engineering aspects of the operating theatre environment; compatibility and flexibility in operating suites; the electrical environment in the operating theatre; airborne infection as a cause of wound infection; comparison of ventilation systems in operating theatres; the bacteriology of operating theatres with and without unidirectional air flow; and operating theatre clothes and drapes.

## PHARMACY

252. KENDALL, R. and DINEL, B. **Management-by-objectives a systematic approach to the implementation of pharmacy services.** *Canadian Journal of Hospital Pharmacy*, Saskatoon, 1974, Sept./Oct., vol. 27, no. 5, pp. 157-164.

This paper describes the use of management by objectives for the systematic implementation of pharmacy services in the new 391-bed University Hospital, London, Ont. The services to be implemented were a total unit dose dispensing system, minibag admixture service, regional drug information service, radiopharmacy dispensing and research service, and a complete manufacturing and formulation service. Examples of general and specific objectives for the opening sequence and of on-going objectives are given. In addition to a plan of the pharmacy, the paper includes a staff organization chart and a PERT chart for the implementation of the unit dose system. Several major systems have already been successfully implemented under the management by objectives plan.

253. SMITH, D. L. and others. **A patient information system in an outpatient clinic.** *Canadian Journal of Hospital Pharmacy*, Saskatoon, 1974, Sept./Oct., vol. 27, no. 5, pp. 165-169.

This paper describes the development of a small but successful patient information system in the adult out-patient department, Vancouver General Hospital. Prior to conducting a drug history interview, the pharmacist reviewed the medical record of each patient to ascertain the diagnoses, pertinent patient problems and previously prescribed medications. At the interview the pharmacist obtained a complete drug history and questioned the patient concerning: prescribed and non-prescribed drugs taken regularly in the past six months; drug allergies; general understanding and respect for the drug therapy; efficacy of his drug therapy; encountered side effects; and illegal use of drugs. The information was recorded on a medical history form (reproduced). All patients were informed that if they received a prescription they should return to the pharmacy interview rooms for instructions about the administration of the drugs, which were typed on a guide to medication administration sheet (reproduced). A number of recommendations on the implementation of such systems are given.

## LABORATORIES

See also Abstract No. 222

254. MCLENDON, W. W. **Clinical laboratory automation and data processing.** *Medical Instrumentation*, Arlington, Va., 1974, Sept./Oct., vol. 8, no. 5, pp. 275-280.

Three approaches to laboratory computerization are discussed in the context of the decision to computerize the clinical laboratories at Moses Cone Memorial Hospital, Greensboro, N.C., and North Carolina Memorial Hospital, Chapel Hill. The approaches are: use of the hospital's central computer; local development of a dedicated computer system; and purchase or lease of a turnkey laboratory system. The paper also presents experience from 1966 to 1973 in implementing and operating a turnkey system, together with the costs of such a system.

255. WHITEHEAD, T. P. and WOOTTON, I. D. P. **Biochemical profiles for hospital patients.** *Lancet*, London, 1974, Dec. 14, vol. ii, pp. 1439-1443.

The development of automated methods of analysis means that several tests can be carried out simultaneously on a single specimen, the combined result being known as a biochemical profile. Trials were carried out at the Queen Elizabeth Medical Centre, Birmingham, at the Royal Postgraduate Medical School at the Hammersmith Hospital, London and in two general practices, to determine the benefits, if any, of introducing biochemical profiles. The benefits were compared with the costs. The results of the trial are set out in graphs and tables. In the hospitals biochemical profiles did not result in an increase of unexpected diagnoses and made only a small difference to treatment patterns. However in one general practice the biochemical information enabled the practitioner to act more independently and to reduce the proportion of patients referred to hospital. Clinical staff in the hospitals welcomed the introduction of biochemical profile analysis though it is important that the increased volume of information should be presented in easily assimilated form. The profiles reduced the complexity of laboratory procedures and enabled valuable information to be gathered on the influence of factors such as age and sex on the normal reference values of the population. Costings indicate that the profile costs no more than the discretionary testing which it replaces.

## BLOOD TRANSFUSION DEPARTMENT

256. MCBARNETTE, L., ROSNER, F. and BISSERUP, R. **Accomplishments of a salaried blood donor recruiter in a municipal hospital.** *Transfusion*, Philadelphia, 1974, Sept./Oct., vol. 14, no. 5, pp. 478-480.

Queens Hospital Center, New York, appointed a full-time, salaried blood donor recruiter in August 1971. His initial efforts were directed primarily towards donor education by publicity and advertising. The next major step was donor motivation. Several educational meetings were held in the community and a joint committee of community residents and hospital staff was formed to explore new methods of donor recruitment, develop public speakers from within the community, and train community people to become chairmen of donor groups. Results of the scheme included: an increase in the monthly average of blood donations from 23 to 210; a 73.3 per cent decrease in expenditure for blood and blood products; total abolition of blood purchased from commercial sources; and a marked reduction in the outdating of blood and in the incidence of reported cases of transfusion-related hepatitis.

257. TASWELL, H. F. and others. **Quality control in the blood bank—a new approach.** *American Journal of Clinical Pathology*, Philadelphia, 1974, Oct., vol. 62, no. 4, pp. 491-495.

The Mayo Clinic Blood Bank and Transfusion Service, Rochester, Minn., is concerned with all aspects of blood donation and supply to other institutions, and so must maintain a highly efficient service. Regular checks on the proficiency of its laboratory services were extended during a 15-month survey period to include checks on staff proficiency in laboratory, office and nursing areas. The aim was to extend

quality control into all areas of the blood banks. Clerical staff generally receive in-service training, but come from a variety of educational backgrounds. Tests consisted of the introduction of 1,143 deliberate errors into reports during the survey period. The non-detection rate averaged 8.7 per cent of errors introduced, but was reduced significantly from 13.1 to 7.7 per cent during the survey. In addition, the number of real errors detected rose sharply in the same period. Errors were reported on the error report form, and this allowed evaluation of both staff and systems to be made, and corrective action to follow. The programme has resulted in better overall quality control, particularly in the bank's office area. Further evaluation of work done in the laboratory and physical examination areas is needed, as significant errors can still occur there.

## DIAGNOSTIC X-RAY DEPARTMENT

258. GODDERIDGE, C. **Recruitment in radiography.** *Radiography*, London, 1974, Oct., vol. 40, no. 478, pp. 231-235.

Several years ago the author of this paper was asked to organize a school of radiography and she describes how she set about recruiting students for enrolment. The reasons for recruitment are set out as follows: (i) to inform people about the radiographic profession; (ii) to inform people about available programmes; (iii) to inform people about various aspects of radiology; (iv) to recruit from as wide an area as possible; (v) to have a better choice of candidates; and (vi) to enable younger children to take the required subjects before applying for training. Recruitment may take place at schools and colleges, through youth services, the Department of Health and Social Security, career days, career centres, departmental visits, hospital magazines and bulletins of the Society of Radiographers. Methods of recruitment include brochures, films and slides and advertising in educational and career magazines. The author undertook a brief survey of schools of radiography. She found that: 14 out of 16 schools actively recruited their students; every school had a brochure; students applied to a school mainly because they had already heard of it or because it was conveniently or attractively situated; and students attended schools of radiography mainly from within a 20-mile radius. It is felt that there is a need for more recruitment by individual schools.

## RADIOTHERAPY DEPARTMENT

See Abstract No. 160

## MEDICAL ILLUSTRATION DEPARTMENT

259. CATTELL, W. and others. **Medical illustration in the new health service.** *Medical and Biological Illustration*, London, 1974, Feb., vol. 24, no. 1, pp. 4-9; May, vol. 24, no. 2, pp. 58-60; Aug., vol. 24, no. 3, pp. 114-118; Nov., vol. 24, no. 4, pp. 174-176.

This feature contains the substance of a symposium presented at the annual conference of the Institute of Medical and Biological Illustration in September 1973. The four papers are on: (i) a clinician's view of the services that departments of medical

illustration should provide; (ii) the implications of reorganization of the National Health Service; (iii) requirements of medical illustration departments in terms of staff recruitment, grading and training; and (iv) the need for broadening the basis of medical illustration, with particular reference to the role of audiovisual experts.

260. FORSTER, S. **Medical illustration in the South West: a survey and a plan for the future.** *Medical and Biological Illustration*, London, 1974, Nov., vol. 24, no. 4, pp. 194-197.

Of the 253 hospitals covered by the South Western Regional Health Authority, six have developed medical illustration services, three in Bristol and one each in Exeter, Plymouth and Redruth (moving eventually to Truro). Units are being established at Taunton, Gloucester, Weston-super-Mare, Barnstaple and Derriford. It is proposed that the regional health authority should: (i) call a meeting of all medical illustrators in the region to explain exactly what reorganization means to them; and (ii) consider the benefits of a regionally organized medical illustration service. Such a service should have a regional centre, embracing all the specialist services, and perhaps three sub-regions based upon existing departments. A table showing staff and work load of the existing units and plans of some of the existing and projected units are included.

## REHABILITATION

See also Abstract Nos. 161, 167, 279

261. STANG, L., SPRAGUE, J. B. and HOLLEY, L. S. **Implementation of rehabilitation services in community hospitals.** *American Journal of Public Health*, Washington, 1974, Nov., vol. 64, no. 11, pp. 1081-1088.

A questionnaire survey of 480 short-stay hospitals in the United States was conducted to determine the diffusion of six innovative health service programmes and the variables associated with implementation. One of the services, rehabilitation, was chosen for study. Analysis of the data by chi-square showed that the larger the hospital and the greater the population density and income of the community, the more rehabilitation services are implemented. Those areas where the population was least affected by chronic disease and disabilities were the areas where implementation of rehabilitation services was greatest and where the need for such services was felt to be highest. The presence of rehabilitation services was the highest in those hospitals where the administrator was a member of several professional organizations and attended some of their meetings.

## PHYSIOTHERAPY DEPARTMENT

262. HICKOK, R. J., editor. **Physical therapy administration and management.** Baltimore, Williams & Wilkins, 1974, ix, 214pp. £6.38

The object of this book is to provide a comprehensive review of administrative and management techniques of specific interest to physiotherapists. It covers: administrative environment; records; personnel management; financial management; policies and procedures; departmental planning, design and construction; and medico-legal aspects.

## DEPARTMENTS FOR SPECIAL THERAPY

263. **Chemical abuse programs.** *Hospitals*, Chicago, 1974, Oct. 16, vol. 48, no. 20, pp. 44-52, 55-57, 59-68, 70.

The six papers in this feature are on: (i) development of a successful drug detoxification and evaluation unit at St. Mary's Hospital, Minneapolis: (ii) report on a survey of facilities for the treatment of alcoholism in mid-Mississippi; (iii) facilities for the treatment of alcoholism at Provident Hospital, Baltimore, which include a detoxification unit, an extended care facility and an out-patient service; (iv) co-ordination of alcoholism and drug abuse services in Waterbury, Conn.; (v) the alcoholism treatment programme at Grant Hospital, Chicago, which includes in-patient and out-patient services and support for the patient's family; and (vi) alcoholism and drug abuse treatment at Pima County General Hospital, Tucson, Ariz., where a nurse co-ordinator is responsible for these services.

264. NOVICK, L. F., HUDSON, H. and GERMAN, E. **In-hospital detoxification and rehabilitation of alcoholics in an inner city area.** *American Journal of Public Health*, Washington, 1974, Nov., vol. 64, no. 11, pp. 1089-1094.

In September 1970 a programme financed by the Harlem—East Harlem Model Cities Agency and operated by the New York City Department of Health was established to provide treatment and rehabilitation for alcoholics living in the area. An existing out-patient unit at Harlem Hospital was expanded and a six-bedded detoxification unit was opened at the Hospital for Joint Diseases and Medical Center, also in Harlem. Patients were referred to the in-patient unit mainly from the hospital and from the out-patient unit, and were admitted on the understanding that they would return to the out-patient unit for follow-up care. The programme is staffed by two supervising and four assistant counsellors, all former alcoholics living in Harlem, who cover both the hospital detoxification service and the out-patient follow-up service. Tables illustrate the results of a study of the first 10 months' operation which revealed previously unsuspected difficulties in caring for alcoholic men in an urban area. Hospital stay was longer than anticipated, follow-up attendance was poor and continued sobriety infrequent. Many patients had serious medical problems and many were addicted to various drugs in addition to alcohol. An approach which could tackle the severe social and economic problems faced by these men might provide greater motivation towards cure and consequently achieve greater success.

## INTENSIVE CARE UNITS

See also Abstract No. 162

265. WILSON, P. **Stock control in an intensive therapy unit.** *Nursing Times*, London, 1974, Nov. 14, vol. 70, no. 46, pp. 1785-1787.

Effective stock control produces greater efficiency, but some stock control methods are in themselves inefficient. Such methods include: entering all items in a ledger, which is time consuming; fixed allocation of shelves for certain items, which causes problems when stock expands; and reliance on a staff member who knows where all items are kept through experience, which creates difficulties when he is away and whilst he is gaining this experience. Sophisticated systems involving computers are efficient,

but expensive. Intensive care units are very expensive, because of the high cost of specialized equipment. Stock control for these units must aim to reduce costs. At the Royal Victoria Infirmary, Newcastle-upon-Tyne, a stock control system was devised which was efficient, durable and relatively simple whilst being economical on time, cost and shelf space. Equipment was 'streamed' into six categories and placed on long runs of shelving with three vertical levels. Perspex signs bearing the names of the categories were placed above each of the vertical divisions, and as much equipment as possible was placed on the shelves in uniform bins, which were labelled with the names, reference numbers and stock quantity of the items. Other equipment which could not be placed in bins was placed on the shelves in its own container and its description, reference number and stock level recorded in a ledger. Within the bins, small items were graded by function into uniform plastic boxes which were labelled. The paper includes photographs of the equipment used, and examples of entries in the ledger.

266. RAMSAY, L. E. **Experience of the coronary care unit at the Royal Naval Hospital, Haslar. October 1971—December 1972.** *Journal of the Royal Naval Medical Service*, Alverstoke, Hants., 1974, vol. 60, no. 3, pp. 116-124.

In 1969 one end of a male general medical ward at the Royal Naval Hospital, Haslar, was partially partitioned to form a makeshift coronary care unit (CCU) of three beds. Apart from the partition and additional electrical power points there were no inbuilt modifications, and the standards of lighting, space and patient privacy would be considered inadequate for a modern CCU. The unit was administered and staffed as part of the general ward. The equipment is described. Apart from one extra nursing sister, the ward containing the CCU had the same number and grades of staff as equivalent wards in the hospital. Criteria for admission to the unit and results of a 15-month period are given. It is concluded that a purpose-built CCU, sophisticated monitoring or alarm systems, and highly trained staff are not essential to provide effective coronary care.

267. YANOWITZ, F. and FOZZARD, H. A. **A medical information system for the coronary care unit.** *Archives of Internal Medicine*, Chicago, 1974, July, vol. 134, no. 1, pp. 93-100.

This paper describes the development of a computerized medical record system for the coronary care unit at the University of Chicago. The minicomputer used has a 12-bit word size and two small digital magnetic tape units. The computer memory contains 4,096 words. A teletype terminal was used for data entry and for printing computer-generated reports. Alphanumeric displays were on an oscilloscope. The data base, the computer system, and its operation are outlined. The system has been successful in terms of participating in the patient's care and in providing an audit, but it represents only one step to a totally computerized record.

268. MURPHY, J. and HODSON, W. A. **Neonatal intensive care. 1. Regional needs and planning.** *Postgraduate Medicine*, Minneapolis, 1974, July, vol. 56, no. 1, pp. 55-58.

This paper outlines a regional plan for neonatal intensive care involving three levels: (i) small urban or rural hospitals serving primarily maternity and neonatal patients who have no complications; (ii) general hospitals having about 1,000 deliveries annually

and equipped to care for the majority of high-risk maternity patients and certain neonates with complications, including those from level (i); and (iii) regional referral centre having at least 10,000 to 15,000 deliveries per year and the neonatal intensive care unit in addition to intermediate and normal newborn nurseries. The paper also discusses potential patient load, transport, and staff.

# SPECIAL HOSPITALS AND UNITS

## OUT-PATIENT

See also Abstract Nos. 246, 253, 275

269. VORZIMER, J. J. and METZ, D. **Modifying the disease-oriented outpatient department.** *New York State Journal of Medicine*, Lake Success, 1974, Aug., vol. 74, pp. 1660-1664.

The current trend in medicine is more and more towards ambulatory care. This paper discusses the ways in which Beth Israel Hospital, New York, is attempting to meet this change in its out-patient department by establishing a model for hospital-based comprehensive ambulatory care. The history of the reorganization is divided into five distinct phases: (i) establishment of a diagnostic clinic; (ii) introduction of an experimental comprehensive care unit; (iii) presentation of results and subsequent approval for reorganization of the out-patient service along the lines of the comprehensive care unit; (iv) comprehensive care unit physicians assumed responsibility for their patients in hospital, thereby providing the missing link in continuity of care; and (v) change to the problem-oriented medical record system.

270. MERSÁNY, G. and KESERÜ, I. A rendelöintézeti járóbeteg-ellátás kibernetikai szemlétetü modellje. **[A cybernetic model of out-patient care in polyclinics.]** *Egészségügyi Gazdasági Szemle*. Budapest, 1974, Sept., vol. 12, no. 3, pp. 348-361; summaries in Russian, English and German, pp. 361-362.

The need for further improvement in the economic analysis of health care is emphasized. It is considered that the cybernetic model is suitable for the analysis of input-output data. The model has been devised for polyclinics with special regard to their relationships to: (i) those patients who go to the polyclinic voluntarily or are referred by their general practitioners; and (ii) the specialized institutions, whose work the polyclinic cannot do, and the patients referred to them. It is concluded that an out-patient clinic works optimally only if, comparing any two periods, the share of its services on behalf of the population is greater than that rendered for higher level institutions, while at the same time producing economic results. [This abstract has been prepared from an English summary of the paper.]

## CASUALTY AND ACCIDENT

See also Abstract No. 163

271. HAMPTON, O. P. **Inhouse training vital for emergency services staff.** *Hospital Medical Staff*, Chicago, 1974, Sept., vol. 3, no. 9, pp. 26-30.

Continuing education is vital for all hospital emergency service staff. These include

not only doctors, for whom it is crucial, but also the various emergency medical technicians working in the hospital and the ambulance services. In-service training provided in particular hospitals will depend upon the types of staff working in the emergency department. In both teaching and community hospitals, these should always include experienced and preferably resident doctors. Where contract physicians are employed, care should be taken in providing them with continuing education particularly if they have previously had less demanding posts. Physicians are largely responsible for their own education, but the hospital should help emergency staff acquire certain vital skills, details of which are given. Similarly nurses, with their scientific training, should themselves keep up-to-date in their field by reading and attending meetings. Departmental meetings, and audiovisual aids and the analysis of patients' daily audits can all help in continuing education. This programme must be planned and co-ordinated by all those responsible for staff training.

## DAY HOSPITALS

See also Abstract Nos. 280, 281

272. NUROCK, R. **The Day Hospitals Organisation: the first 4 years.** *South African Medical Journal*, Cape Town, 1974, May 25, vol. 48, pp. 1053-1058.

This paper describes the development and work of the Day Hospitals Organisation in Cape Province, South Africa, to provide care for the indigent population. Each day hospital is completely self-contained to obviate referring patients to general hospitals. In addition to four to six doctors and 12 to 15 specially trained nurses, they have a physiotherapy clinic, modified diagnostic X-ray department, social work department, and pharmacy. The hospitals are administered from a central headquarters by a medical superintendent, matron and secretary, with supporting staff, pay office, supplies office, transport office and engineering workshops. The day hospitals are flexible units and experiments are being made with geriatric and out-patient services, four have operating theatres for certain procedures and surplus space in the newer day hospitals is being used for labour units. There are now 17 day hospitals in the organization with six or seven scheduled for erection. There are 398 doctors, nurses and paramedical staff and attendance is well over 120,000 patient-visits/consultations per month. Most of the general hospitals have reported an easing of the pressure on their services.

## CHEST

273. DANDOY, S. and WIGGINS, K. **Current status of general hospital use for patients with tuberculosis in the United States: an update.** *American Review of Respiratory Disease*, New York, 1974, Oct., vol. 110, no. 4, pp. 442-445.

A 1972 survey of the use of general hospitals for the treatment of patients with tuberculosis was repeated in 1973. Of 46 states which completed the question, 14 use general and specialized hospitals, 15 use only general hospitals and 17 continue to use only specialized tuberculosis hospitals. Patients are usually treated in isolation rooms on the regular medical floor of the hospital under the isolation procedures

outlined by the Center for Disease Control [see *Hospital Abstracts*, Vol. 11, Abstract 131]. The criteria used to permit removal of a patient from isolation are adequate chemotherapy, clinical improvement, and a decreasing number of bacilli in the sputum smear. Twelve states reported average lengths of stay in general hospitals of 35 days or less. Tuberculosis care in general hospitals is supported by a combination of federal, state and local funds. The sanatorium facilities no longer needed for patients with turberculosis are being converted to a variety of other uses.

## INFECTIOUS DISEASES AND ISOLATION

274. MARCH, D. C. **The personnel problems of opening a smallpox hospital.** *Hospital and Health Services Review*, London, 1974, Nov., vol. 70, no. 11, pp. 389-392.

The general policy on hospital provision for smallpox in Great Britain is to have first-line hospitals which are to be held empty but carefully maintained. These should be supported by designated second-line hospitals, normally used for other purposes but which could be evacuated at short notice. In the North West Region the first-line hospital is the 40-bed Ainsworth Smallpox Hospital situated in a very isolated position between Bolton and Bury. The only permanent staff are a caretaker and his wife; when a patient is admitted the hospital relies on volunteer staff from any health authority in the area. Because of the high risk of infection all medical, nursing and domestic staff on call must be vaccinated and revaccinated annually. They must be trained or experienced in handling infectious diseases and must be resident in the nurses' home for a stipulated period to prevent the spread of infection to the community. There are serious problems in recruiting and keeping staff in all grades. Bury Area Health Authority, which is responsible for the administration of the hospital, writes to all health authorities in the region and runs week-end courses for nursing and domestic staff. Working and living conditions within the hospital are described. When the hospital opens, it is immediately news for press, television and radio. This causes problems with the telephone and the direct line has been replaced by an ex-directory number so that calls go through Bury General Hospital. A very wide range of disposable supplies (including clothing) are used because of infection risks.

## CHILDREN

See also Abstract Nos. 164, 246, 303, 304

275. ALPERT, J. J. and FEINBLOOM, R. I. **Advances in hospital ambulatory services for children.** *Pediatric Clinics of North America*, Philadelphia, 1974, May, vol. 21, no. 2, pp. 263-275.

This paper reviews the background, services, research functions, effectiveness and educational role of hospital ambulatory services in the care of children in the United States. The explosive increase in their use is mainly for primary care needs, a function for which they are largely inappropriately designed at present. Within the restructuring of the present health care system, the emergency and out-patient departments should

continue to perform emergency and referral functions, but make major modifications in the primary care functions. The major reasons for offering primary care within the teaching hospital are educational and to provide service to a limited population who do not or cannot use community facilities. Steps should be taken to strengthen community services. A list of 92 references is included.

## GERIATRICS AND LONG-STAY

See also Abstract Nos. 165, 172, 307

276. DUNK, C. **Equipment for the handicapped: helping the helper.** *British Journal of Hospital Medicine*, London, 1974, Nov., vol. 12, equipment supplement, pp. 41-44, 48.

A multidisciplinary team financed by St. Bartholomew's Hospital and the Department of Health and Social Security is working in long-stay hospitals on low-cost improvements in equipment and environment to alleviate stress in nursing staff. Work in three areas is described to illustrate the type of research being done: (i) development of a simple piece of equipment to stop handicapped people falling out of bed; (ii) the beginning of a whole system of simple devices for alleviating the problems of bathing the severely handicapped; and (iii) design of a simple system of panels for subdividing and personalizing space.

277. MCQUILLAN, F. L. **Fundamentals of nursing home administration. 2nd edition.** Philadelphia & London, Saunders, 1974, xiii, 403pp. £5.95

The 15 chapters in this volume are arranged in five parts: philosophy and planning; the administrator at work; providing nursing care and rehabilitation; providing services for patients; and changing concepts and evaluation. Each part has a bibliography.

278. PARKER, R. and BOYD, J. **A comparison of a discriminant versus a clustering analysis of a patient classification for chronic disease care.** *Medical Care*, Philadelphia, 1974, Nov., vol. 12, no. 11, pp. 944-957.

Discrimination analysis was used to assess the value of a patient classification questionnaire in assigning patients to an appropriate level of chronic disease care. A multihierarchical centroid clustering programme was used to group patients into clusters according to similarities in the profiles gained from their questionnaires. The structure of the clustering has been investigated in some detail and related to the discriminant analysis findings. The paper is supported by tables and diagrams.

279. REDFORD, J. B., BROSTROM, M. A. and GOUGH, K. M. **In extended care facilities: reactivation programs cut nursing care costs.** *Dimensions in Health Service*, Toronto, 1974, Nov., vol. 51, no. 11, pp. 14-17.

A programme for reactivating geriatric patients set up six years ago in the Edmonton region of Alberta is discussed. Surveys showed that about 40 per cent of Canada's

chronic sick were over 65, and that as these patients became more institutionalized and dependent on nursing care, the cost of caring for them increased rapidly. A travelling team was then established to encourage the rehabilitation and reactivation of geriatric patients. Based at the University of Alberta Hospital and visiting extended care hospitals in north central Alberta, the team comprised a nurse and a physiotherapist assisted by staff of the department of rehabilitation medicine. The team conducted a programme of education for nursing staff and consultation on institutionalized patients. Hospital staff reacted favourably, and in general the programme lessened patients' institutionalization when deterioration in their condition was not inevitable. When an institution was visited regularly, the condition of patients was usually maintained throughout that period. Since patients tended to deteriorate rapidly following institutionalization the intensive, structured programme appeared to be effective during its six months in operation. A longer programme, enabling more patients to remain at least semi-independent, would certainly benefit them and enable hospital costs to be kept to a minimum. Diagrams show the results of various aspects of the programme.

280. LORENZE, E. J., HAMILL, C. M. and OLIVER, R. C. **The day hospital: an alternative to institutional care.** *Journal of the American Geriatrics Society*, New York, 1974, July, vol. 22, no. 7, pp. 316-320.

This paper discusses the objectives and admission criteria as they pertain to day hospitals for patients with physical disability or chronic illness as distinct from patients with primary psychiatric illness. The day hospital at the Burke Rehabilitation Center, White Plains, N.Y., is open from 8.30 to 17.30 Monday to Friday and provides a broad range of services. Transport is provided within a five-mile radius. The paper describes its criteria for acceptance, intake process, and research programme. This programme is designed to obtain extensive data on admission criteria, cost of service, and the resulting benefits.

## CANCER

281. RATKOWSKI, E., LIEBERMANN, R. and HOCHMAN, A. **Day care for cancer patients.** *Journal of the American Medical Association*, Chicago, 1974, Oct. 21, vol. 230, no. 3, pp. 430-431.

In this review of the activity of a day care unit for cancer patients at the Hadassah University Hospital during a six-month observation period the goals and achievements of the unit, the diagnostic categories of the patients treated and their reactions to treatment as well as those of their families are described. Patients are referred to the unit and treatment continues to be supervised by physicians of the Oncological Department of which the eight-bedded unit forms an integral part. The permanent staff consists of a part-time physician assisted by other members of the medical staff, a full-time nurse and a part-time social worker. All hospital services are at the patient's disposal. The unit was used by 188 patients during the observation period; a table records their diagnosis, treatment, attendance and follow-up. Chemotherapy was the main treatment given and consequently became a decisive factor in patient selection. No complications resulted specifically from day care treatment and with a few

reservations patients reacted favourably, since the service enabled them to lead a fuller, more normal life.

## NEUROLOGY AND NEUROSURGERY

282. OUNSTED, C. **A special centre for children with seizures.** *Health Trends*, London, 1974, Nov., vol. 6, no. 4, pp. 69-71.

The Children's Epilepsy Centre at Park Hospital for Children, Oxford, can accommodate 30 children. There is also a mothers' unit, in which each mother has a room of her own; it has washing, laundry and bathing facilities and a common dining-room, sitting-room and kitchen. The mother's unit is closely linked to the main hospital building, which is arranged to be quite unlike what a child or parent may imagine a hospital to be like. There are a variety of playrooms. The bedrooms are upstairs and quite separate from the day living department. There is a large occupational therapy area and a school with an exceedingly high ratio of staff to pupils. More than 200 children a year are admitted, the length of stay being very variable. The work and experience of the centre are described.

## EAR, NOSE AND THROAT

283. **ENT department: increasing bed occupancy.** (Abstracts of Efficiency Studies in the Hospital Service, No.167) London, Her Majesty's Stationery Office, 1974, [2]pp. £0.3½.

A general review of an ear, nose and throat department in a 585-bed general hospital was undertaken with the combined object of reducing the waiting list for in-patient admissions and increasing bed occupancy. As a result of the study all waiting list patients were contacted to remove those no longer requiring treatment; subsequent reviews were then conducted at six-monthly intervals. The period of notice to patients was extended and a pre-paid letter was introduced to encourage patients to advise the hospital if they could not keep appointments. Male and female patients were accommodated in bays in a 27-bedded ward hitherto used for males. Children were transferred to the freed 22-bedded ward increasing the allocation of children's beds and releasing 15 beds for other specialties. A revised pattern of admission comprising alternate adult and children days was adopted to make optimum use of bed availability and theatre time. As a result adult bed occupancy increased from a mean 54.3 per cent to a mean 80.9 per cent, while the children's bed occupancy increased by 3.5 per cent. Mean monthly discharges rose from 170 to 201 and discharges per bed from 2.7 to 4.2.

## CARDIOLOGY

See Abstract Nos. 266, 267

## ORTHOPAEDICS

See Abstract No. 225

## UROLOGY

See also Abstract No. 227

284. WEST, R. R., CROSBY, D. L. and JONES, J. H. **A mathematical model of an integrated haemodialysis and renal transplantation programme.** *British Journal of Preventive & Social Medicine*, London, 1974, Aug., vol. 28, no. 3, pp. 149-155.

This paper describes a mathematical model of an integrated renal dialysis and transplantation programme which has been used to project needs at a Cardiff unit. The three treatment areas (hospital dialysis, home dialysis and transplantation) are represented in the model by three states which are sub-divided into one and two substates respectively. After briefly describing the model the authors explain the calculation of parameters for it and set out data relating to transitions from the hospital dialysis unit and the survival of renal transplants. Tables and diagrams in the text illustrate a four-state model and a seven-state model, survival in the dialysis unit, survival of renal transplants, interstate transitions, the validity of the model, and forward predictions. The model could be used for the calculation of future numbers in other centres or nationally by substituting the appropriate interstate transition probabilities or rates.

## MATERNITY

See also Abstract Nos. 162, 268

285. SHELDON, R. S. **Consolidation of hospital obstetric services.** *Medical Clinics of North America*, Philadelphia, 1974, July, vol. 58, no. 4, pp. 885-899.

The decrease in the birth rate, increasing rise in perinatal salvage, growing medical sophistication of women, and potential government intervention in the organization of health care in the United States suggest the need to consolidate small hospital maternity services into efficient units that provide high-risk pregnancy care and intensive infant care facilities. Services that deliver about 2,000 infants annually appear to be the most efficient because they are able to provide constant patient management and adequate technology and specialists for difficult cases. A suitable unit of this size is described, with two plans. It incorporates the principles of clean obstetric traffic patterns, rapid access to newborn intensive care facility from the delivery rooms and from outside, convenience for family-oriented maternity care, acceptance of selected gynaecological patients to occupy postpartum beds when they are empty, and pleasant postpartum ward surroundings with family-centred nursing.

286. KINGSLEY, C. **Evolution of an emergency obstetric unit.** *Midwives Chronicle*, London, 1974, Dec., vol. 87, no. 1,043, pp. 413-414.

An emergency obstetric unit was established at University College Hospital in 1945. This paper shows how the work of the unit has evolved since then. As progress has been made towards selecting those patients who are most suitable for home or hospital confinement, the number of emergencies arising out of labour has been drastically reduced. However, the fact that the emergency obstetric unit is still called to women in labour, suggests that it is never really safe to allow any mother to be

delivered in the home. It would seem beneficial to deliver all mothers in hospital, with discharge the same day or 48 hours later. As the emergency obstetric unit is being called to increasing numbers of patients suffering from threatened, inevitable and incomplete abortions, as well as antepartum haemorrhage, and with the ever-present danger of secondary postpartum haemorrhage, it seems that a streamlined service of this kind will be necessary for some years to come.

## GYNAECOLOGY

See Abstract No. 166

## OPHTHALMOLOGY

287. GILKES, M. J. and HANDA, V. K. **The duration of pre- and post-operative in-patient stay in ophthalmology.** *Health Trends*, London, 1974, Nov., vol. 6, no. 4, pp. 76-78.

This paper describes a study to obtain information about how long patients were kept in hospital both before and after certain, largely standard, ophthalmological procedures. Of 289 questionnaires sent to consultant ophthalmologists, 222 (76.8 per cent) were completed. The results are presented in a table. The range of variation in the length of stay appeared to be nationwide. In a few rural areas prolonged stay was related to difficulties of transport, but the extremes of the range did not seem to be affected in this way.

## DENTISTRY

288. LOWRY, J. C. **Some economic aspects of oral surgery.** *British Journal of Oral Surgery*, Edinburgh, 1974, March, vol. 11, pp. 249-255.

This paper reports a study of the cost of oral surgery in four different hospitals: (i) a regional oral surgery unit within a teaching hospital; (ii) a peripheral hospital, in which in-patient and out-patient oral surgery is performed; (iii) an out-patient dental teaching hospital; and (iv) a general teaching hospital where in-patient operating for the dental hospital is carried out. The figures for the four hospitals are briefly discussed. The difficulties of being accurate with the cost of day care surgery under the present system of hospital accounting are mentioned. From the economic point of view the comparisons of day and in-patient care for relatively routine cases reveal a saving of only £23 for the central teaching hospital and a mere £10 for the regional oral surgery unit and the peripheral hospital. This finding is discussed.

## PSYCHIATRY

See also Abstract Nos. 206, 263, 264

289. BELLAK, L., editor. **A concise handbook of community psychiatry and community mental health.** New York & London, Grune & Stratton, 1974, xiii, 251pp. £3.50

Following an overview of community mental health, this volume is in three parts: (i) meeting community mental health centre problems: (ii) current special problems

and special services in community mental health (old age, childhood, drug abuse and alcoholism); and (iii) beyond the community mental health centre, including the health maintenance organization, a non-medical model and citizen participation.

290. FAIRWEATHER, G. W., SANDERS, D. H. and TORNATZKY, L. G. **Creating change in mental health organizations.** New York & Oxford, Pergamon, 1974, x, 219pp. £2.60

This volume presents the results of a national experiment aimed at finding the parameters of social change in mental health organizations. In order to complete the experiment it was necessary to involve 255 psychiatric hospitals in various ways in an attempt to persuade them to adopt an innovative treatment method, the community lodge. Development of a community lodge involved two phases: (i) creating autonomous problem-solving groups of patients in the hospital; and (ii) moving the functioning groups into community residences as units. The book covers: background to the experiment; factors affecting the decision to adopt the innovation; the process of activating adoption; essential conditions for activating adoption; follow-up; principles for creating change in mental health organizations; and social policy decisions aimed at solving human problems.

291. COPAS, J. B., FRYER, M. and ROBIN, A. **Treatment settings in psychiatry: a comparative study.** London, Kimpton, 1974, 104pp. £2.25

There has been considerable discussion over the past decade about the future of psychiatric services in Britain. The essence of these discussions has been the relative merits of psychiatric units in district general hospitals and psychiatric hospitals. This study examines some of the questions involved on the basis of services in the Southend area. It is shown that, in the early stages of treatment, a general hospital, while in the short term not improving on therapeutic results, can operate with 60 per cent of the beds used for similar patients in a good psychiatric hospital. On the other hand, a good psychiatric hospital should be able with appropriate modifications to match these results.

292. CRAFT. M.J. **A description of a new community forensic psychiatric service for doctors.** *Medicine, Science and the Law*, Bristol, 1974, Oct., vol. 14, no. 4, pp. 268-272.

From 1961 onwards a service was developed in Mid Wales to meet the clinical needs of mentally abnormal offenders who were: (i) mentally ill; (ii) psychopathic or committed offences because of an existing personality disorder; and (iii) mentally handicapped. Security and non-security remand facilities were needed so that adequate reports could be made to the courts, and facilities for treatment and after-care acceptable to the courts were also required. Figures for North and Mid Wales agree with those for other areas indicating the number of potential patients to be about 50 per million population. During 1961 to 1965 an isolated house in the Cader Idris area was adapted to cater for 45 long-stay mentally abnormal offenders. Following admission to this hospital on remand, full reports were sent to the courts for each patient. Fears about abscondence have been alleviated by the total lack of this since 1972. Efficient staffing has enabled the unit to develop a pleasant atmosphere in

which patients are encouraged to develop as individuals. Suicidal gestures are rare and efforts have been made to promote after-care, although this is still considered inadequate. Results of a survey into the whereabouts of former patients are included.

293. KERSEY, W. **Retraining of state hospital staff for community services.** *Exchange*, Sacramento, 1974, March/April, vol. 2, no. 2, pp. 13-15.

The movement of patients from California state psychiatric hospitals to community mental health services led to a rapid decline of patients in the hospitals and the need to retrain their staff. Pilot projects had demonstrated the potential of psychiatric technicians in out-patient and after-care services. Courses for retraining hospital staff for this role were established at two centres. The courses lasted three months on a full-time basis, with one or two days each week devoted to classroom work and the remainder on field assignments. Students continue to be paid by their home hospitals. By February 1974 almost 100 hospital employees had completed the courses and a significant number were working in the community.

294. CHRISTIE, L. S. **Researching staffing needs in psychiatric hospitals.** *Nursing Times*, London, 1974, Nov. 28, vol. 70, no. 48, pp. 1870-1871.

The author suggests that psychiatric wards should be categorized according to patient needs rather than to diagnostic categories of crisis-oriented referral. As a result the quantity and quality of nurse staffing allocation would become clearer and consequently more effective. All types of care must be investigated and assessed by research workers who are trying to find some means of being able to forecast future staffing requirements. Requirements include establishing realistic patient needs, defining special dependency categories, providing a coding system for wards and defining their main characteristics, developing a points system for patient dependency, designing time and work allocation sheets, and detailed analysis of each ward or unit in terms of numbers, patient categories and patient needs over a given period of time.

295. BYRD, R. E., LA LONDE, C. and SOTH, N. **Four stages of institutional development in an adolescent psychiatric hospital.** *Hospital & Community Psychiatry*, Washington, 1974, Oct., vol. 25, no. 10, pp. 655-659.

Any new psychiatric hospital may be said to have six managerial tasks to perform: staffing, organization, planning, controlling, consolidating and renewing. Each task is associated with a critical stage of development or critical issue that must be resolved. In a study of a small, fairly new adolescent psychiatric hospital, the authors identified four critical incidents that reflect the first four tasks. The incidents, the associated issues, and their resolution are described. The authors believe that psychiatrists have important roles to play in the developmental stages and in preventing institutional pathology.

296. HAILEY, A. M. **The new chronic psychiatric population.** *British Journal of Preventive & Social Medicine*, London, 1974, Aug., vol. 28, no. 3, pp. 180-186.

Epidemological data from the Camberwell area of London for the years 1964 to 1972 are presented. The data from the Camberwell Psychiatric Case Register are used to examine the accumulation of a new chronic population in three types of

psychiatric case—in-patient, day patient and hostel care. The psychiatric services in Camberwell are briefly described and the number and characteristics of new long-stay patients in each form of care care analysed against a background of expanding services based on the Maudsley Hospital. The net accumulation of new long-stay in-patients stabilized after a few years but the number of long-stay day patients and residents in psychiatric hostels was still increasing. Nine tables of figures are given.

297. SANDERS, R. **All play and no work ...** *New Psychiatry*, London, 1974, Oct. 31, vol. 1, no. 4, pp. 10-11.

The author considers the problem of boredom in psychiatric patients. Some patients are bored because they feel looked after too much, others consider that boredom is part of their illness. Institutionalism affects nurses as well as patients and a vicious circle of routine, complacency, depression, indifference and apathy develops. Factors leading to institutionalism include: loss of contact with the outside world; enforced idleness; the bossiness of staff; loss of personal friends, possessions and personal events; the use of drugs; the ward atmosphere; and little hope for a future outside the hospital. Boredom may occur in all patients but it is more deep seated and harder to overcome in long-stay patients. Some typical views of patients at West Park Hospital, Epsom, are described. Shortage of staff is the greatest hindrance in preventing boredom. The most important factor in overcoming it and the associated problem of institutionalism is that of dispelling the feeling that life in the hospital is isolated from and inferior to life in the outside world. Volunteers can provide human stimulus and can improve the quality of patient's lives. They and other visitors and the media from outside the hospital are probably the greatest asset in defeating boredom. The closer the patient's life can come to normal daily life in the community the more staff and patients can enjoy variety in their lives.

298. FRYER, M. **Therapy in the sun.** *New Psychiatry*, London, 1974, Oct. 31, vol. 1, no. 4, pp. 19-21.

In May 1974 a party of seven patients from the Jane Walker Hospital for mentally handicapped adults in Essex, spent a holiday in Majorca. Initially 20 residents likely to benefit from the experience were selected but finance and suitability later reduced the number. In the 18 weeks before the holiday those selected were given careful preparation, including training in road safety, personal hygiene and social etiquette, explanation of the currency and what to do if ever separated from the main party. Visits were arranged to Royal Air Force bases in preparation for the flight. Medical examinations took place at monthly intervals for six months before departure and no resident became ill whilst on holiday. The agreement of the next of kin was obtained or failing that the consultant psychiatrist acted in loco parentis. Only three staff, a ward sister and two student nurses accompanied the party. One of these was nominated to cash the travellers' cheques which were kept in the hotel safe. Accommodation at the hotel proved satisfactory and the patients were accepted as equals by the other residents and the staff. Normal holiday activities such as visits to places of interest and a night club, shopping and sending postcards were undertaken. Cost of the holiday was £53.05 per head and residents met this from their own savings supplemented by the usual funds available for holidays. The holiday was considered a great success and a very wide range of benefits to patients resulted from it.

299. WINKLER, R. C. **Research into mental health practice using pseudopatients.** *Medical Journal of Australia*, Sydney, 1974, Sept. 14, vol. ii, no. 11, pp. 399-403.

Hospital roles and attitudes to patients are such that the patient's view of mental health practice in psychiatric hospitals is often not understood and is invalidated. Observations made by normal volunteers who act as pseudopatients to gain admission to hospitals but who behave normally once inside are capable of articulating what happens to patients in psychiatric hospitals from the patient's perspective. This is a progress report on observations made by four clinical psychology graduates who admitted themselves to Sydney Metropolitan hospitals. The observations deal with drugs, explanations given to patients, use of pyjamas, boredom and staff reaction to patients' complaints.

300. COOKSON, P. **The blind leading the blind.** *Nursing Mirror*, London, 1974, Nov. 28, vol. 139, no. 22, pp. 64-65.

This paper outlines the steps which have been taken to improve the care of blind psychiatric patients at Whittingham Hospital, near Preston. These include: encouragement at ward level; afternoon socials for all blind patients in the hospital; contact with the local authority social services, whose social worker with special responsibility for the blind now visits the hospital one afternoon each week and also lectures to student nurses; and reciprocal visits with blind centres in the community.

301. MARATOS, J. and KENNEDY, M. J. **Evaluation of ward group meetings in a psychiatric unit of a general hospital.** *British Journal of Psychiatry*, London, 1974, Nov., vol. 125, pp. 479-482.

The aim of this study was to measure the effect of ward group meetings held in a psychiatric unit of a general hospital. The hypothesis was that a measurable improvement in patients' behaviour would result. Two of the four mixed open psychiatric wards in a general hospital in central London were used. Each had 12 female and eight male beds, and patients were adults of mixed diagnosis but with similar socio-economic backgrounds. The wards were used alternately as subject and control group, each taking part in weekly ward and staff meetings for nine weeks. The effect on patients' behaviour was assessed by comparing the number of disruptive incidents recorded in the nurses' notes and by scores on a 'ward atmosphere' scale and an 'attitude' scale. In both wards the holding of meetings was associated with a significant reduction in the number of incidents, especially absconding from the ward and refusing medication. This was interpreted as suggesting that ward meetings, by providing an opportunity for verbal expression of hostilities, prevent some of the non-verbal acting out of these feelings. Five tables of figures are given.

302. LEOPOLDT, H., HURN, R. J. and ASTROP, L. **Selection for group-home living.** *Nursing Mirror*, London, 1974, Dec. 5, vol. 139, no. 23, pp. 58-62.

During the past 10 years 176 psychiatric patients from Littlemore and Warneford Hospitals, Oxford, have become tenants of group homes. Today 18 houses accommodate 103 patients. [See *Hospital Abstracts*, Vol. 14, Abstract 1666.] Until now patients for the group homes have been selected by a multidisciplinary team, but there have been no listed, definite selection criteria. This paper suggests 15 assessment and

selection criteria. For each criterion a patient can be rated and scored as: suitable without qualification, 1; suitable with qualification, 2; or unsuitable, 3. A total score closer to 16 than 29 would be suitable for a group home without qualification, closer to (and including) 29 than 16 suitable with qualification, and 30 or more unsuitable. Testing the scheme with three pairs of raters assessing three sets of group home residents and two sets of ex-residents showed that it was satisfactory in terms of reliability and validity.

303. BARKER, P., editor. **The residential psychiatric treatment of children.** London, Crosby Lockwood Staples, 1974, xiii, 354pp. £7.50

In-patient psychiatric facilities for children in Great Britain date back little further than the start of the National Health Service in 1948. Since then some 50 units have come into operation. This book examines aspects of the work of some of these units. Their aims, structure and philosophy vary, reflecting both local needs and the interest and skill of those working in them. There is only one general description of a unit. Other chapters cover the treatment of particular syndromes, and there is one on nurse training. A list of the units in the United Kingdom is included as an appendix.

304. JONES, M. and BEAVAN, M. **Problems in establishing an adolescent unit.** *Nursing Times*, London, 1974, Nov. 21, vol. 70, no. 47, pp. 1822-1824.

The work of the Adolescent Unit at St. David's Hospital, Carmarthen, is described. A villa in the hospital grounds was adapted to house 15 adolescents in single, two- or three-bedded rooms and common rooms were provided. A converted nearby staff house was used as a school, as most patients were of school age. Most unit staff only had experience of working with adult psychiatric patients, and this caused some problems. Gradually staff realized that the unit itself could be a powerful 'therapeutic milieu', and that patients often responded more favourably to disapproval from other patients than from staff. Traditional psychiatric treatment, including group and family therapy, also played an important role. Dissent amongst the staff sometimes proved an obstacle to successful treatment, and the admission of more difficult patients, resulting in some conflict with the main psychiatric hospital, led to the temporary closure of the unit. However, the closure obliged the staff to develop a greater understanding both of patients and of each other, and a more successful unit resulted.

305. TODD, N. A. **Patterns of admission in schizophrenia.** *British Journal of Psychiatry*, London, 1974, Dec., vol. 125, pp. 588-592.

This study gives an account of first admissions, re-admissions and recruits to the long-stay population amongst all male patients admitted to Leverndale Hospital, Glasgow, with a diagnosis of schizophrenia during the years 1967 to 1970. The results showed that 83 per cent of the patients were re-admissions. The proportion of first admissions for schizophrenia (17 per cent) appears to be lower than in areas where there are no psychiatric units in general hospitals. These units exercise a selective function probably borne out by the high proportion (44 per cent) of compulsory first admissions. Follow-up of the first admissions showed approximately equal numbers in three grades of clinical state living outside hospital and a smaller number who were long-stay in-patients. A majority of the patients showing the highest degree of clinical and social recovery were on no treatment whilst a majority of those who were most

deterioriated were on medication. This draws attention to the present limitations of treatment. If the results in re-admitted cases are no better this indicates a considerable amount of psychiatric morbidity and strain on the families in the community. Practical conclusions are that provision for long-stay patients will still have to be made and community services developed.

306. QUINN, M., MARTINDALE, A. and HUNTER, E. **Community accommodation for the mentally handicapped.** *British Journal of Mental Subnormality*, Birmingham, 1974, Dec., vol. 20, no. 39, pp. 86-89.

There are many patients in hospitals for the mentally handicapped who need neither medical treatment nor nursing care. This is a study of the reactions of 13 local authority social service departments to the problem of returning such patients to the community. About 40 per cent of patients at St. Catherine's Hospital, Doncaster, were identified as no longer requiring hospital care and their names were submitted to 13 local authorities for consideration for discharge. The 182 patients assessed fell into four categories: (i) patients who were discharged by the local authorities (17 per cent); (ii) patients put on the waiting list for discharge (23 per cent); (iii) patients for whom no decision was taken (37 per cent); and (iv) patients considered unsuitable for discharge (nine per cent). The outcome of assessment depended on the local authority, the age, sex and duration of stay of patients, and the date of notification to local authorities. The outcome of a notification did not depend on whether the patient was admitted from within or from outside the present catchment area of the hospital. The shortage of local authority accommodation accounts for the small proportion of discharged patients and the large number of patients for whom no definite plans have been made reveals a very unsatisfactory state of affairs.

307. WHITE, D. M. D. **Psychogeriatrics and community care.** *Lancet*, London, 1975, Jan. 4, vol. i, pp. 27-29.

The present organization of community care for elderly psychiatric patients is frequently inadequate. The phrase is often used to conceal the deficiencies of traditional institutional facilities, for which community care is apt to be regarded as a cheap substitute. The 600 referrals to the Department of Mental Health of the Elderly, Tindal General Hospital, Aylesbury, in 1973, could be divided into three groups requiring: (i) no, or very little follow-up; (ii) a fair amount of support from the domiciliary psycho-geriatric service, but no other links with the hospital; and (iii) day care, supportive admissions, etc. It might be beneficial to introduce true community care, capable of providing a full-time service to patients in their own homes, in preference to institutional facilities. Such a scheme would benefit patients, who would prefer to remain in familiar surroundings, but implications for the community would not accord with present official attitudes.

## SOCIAL MEDICINE

308. LEBOURDAIS, E. **A chance to lead: the hospital's role in contraception.** *Dimensions in Health Service*, Toronto, 1974, Dec., vol. 51, no. 12, pp. 18, 21-22.

Organizations providing birth control counselling and supplies are unevenly distributed around Canada and are ill fitted to meet apparent current needs. While

hospitals are concerned with birth and abortion their role in pregnancy prevention has been minimal with the assumption that this is being dealt with by doctors in the community without any real assurance that this is so. To learn the extent of hospital involvement in the provision of birth control services, a questionnaire was distributed to general hospitals of 200 beds and over in Canada. From their answers it is apparent that the majority of the larger hospitals do not have established birth control programmes and that a large number of the hospitals which perform abortions do not offer birth control services. Most hospitals however performed sterilizations. The author concludes that hospitals can no longer continue to provide abortion services with no regard for prevention of further pregnancy and must attempt to reach the patients who need information but do not ask for it.

309. WENDT, G. G. and THEILE, U. **A pilot scheme for a genetic clinic.** *Humangenetik*, Berlin, 1974, vol. 21, pp. 145-151

After outlining the current position of genetic counselling in West Germany, this paper describes the genetic clinic established in Marburg in 1972. It is situated in the same building as the university research department of human genetics but separate from it. Two physicians and four auxiliary helpers are employed full-time; they are assisted by the laboratories of the research department. Information and education of the public is an important part of the clinic's work. The 1,152 cases dealt with from August 1972 to August 1973 are reviewed. This pilot scheme is regarded as a success.

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